DOCUMENT RESUME

ED 247 382 CE 039 382

AUTHOR Oinonen, Charlotte M., Ed.; And Others
TITLE The UW-Stout Analysis: Schools, Youth and Work. Parker Project Number 2. Bulletin No. 4412.
INSTITUTION Wisconsin Univ. - Stout, Menomonie. Center for Vocational, Technical and Adult Education.
SPONS AGENCY Parker Pen Co.; Wisconsin State Dept. of Public Instruction, Madison.
REPORT NO WDPI-Bull-4412
PUB DATE May 84
NOTE 80p.; For related documents, see ED 241 799, ED 242 890, ED 244 122, and CE 039 383.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS Career Education; *College Preparation; Comparative Analysis; Educational Needs; Educational Objectives; *Education Work Relationship; Employee Attitudes; Employer Attitudes; *Employment Potential; Employment Qualifications; Entry Workers; High School Graduates; High Schools; Job Performance; Job Placement; Job Skills; *Job Training; Labor Needs; Outcomes of Education; Questionnaires; *Relevance (Education); School Effectiveness; State Surveys; *Vocational Education
IDENTIFIERS Parker Project; *Wisconsin

ABSTRACT

A study, which was part of a multiphased secondary education improvement program entitled the Parker Project, examined Wisconsin employer and employee perceptions of the effectiveness of job training and career education available in high schools in the state. Survey data indicated that employers are not entirely satisfied with the training provided by secondary schools in these areas. Based on employer assessments of future labor and skill needs, it appeared that unless work preparation curricula are changed, entry-level employees will be poorly prepared for jobs in the future. Despite the fact that vocational graduates were more likely to be satisfied in their jobs than were their counterparts from college-preparatory programs, it appeared that both programs are succeeding in their objectives. Although vocational graduates tended to have lower grades and less desire to go on to postsecondary training than did the students enrolled in college-preparatory programs, they had an edge in the job market, a fact probably attributable to their greater knowledge of job-seeking techniques and greater familiarity with actual tools and equipment used on the job. (Appendixes to this report include a summary of Parker Project data and copies of various survey instruments used in the study.) (MN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED247382

CE

NUMBER

2

The UW-Stout Analysis:
Schools, Youth & Work

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

L Hartnatrich

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PARKER PROJECT

CE030382

GEORGE PARKER / CHAIRMAN OF THE BOARD / THE PARKER PEN COMPANY
HERBERT J. GROVER / STATE SUPERINTENDENT / DEPARTMENT OF PUBLIC INSTRUCTION

THE UW-STOUT ANALYSIS:
Schools, Youth and Work

Summarized and Edited

By

Charlotte M. Oinonen

Director, Parker Project

From

The Parker Data Collection Project

The UW-Stout Center for Vocational, Technical and Adult Education

Compiled by

Betty Gertner

Harold Halfin

Margaret Melick

Orville Nelson

George Parker/Chairman of the Board/The Parker Pen Company

Herbert J. Grover/State Superintendent/Department of Public Instruction

Bulletin No. 4412

THE PARKET PROJECT

is a partnership between the Parker Pen Company and the Department of Public Instruction. This publication and all project activities are a result of this partnership and the joint funding from the Parker Fund of the Janesville Foundation and the DPI.

Herbert J. Grover
State Superintendent
of Public Instruction

George Parker
Chairman of the Board
The Parker Pen Company

B. Dean Bowles
Deputy State Superintendent
of Public Instruction

John T. Benson
Assistant State Superintendent
Division for Instructional Services

Richard Dignan, Director
Bureau for Vocational Education

Charlotte M. Oinonen, Director
Parker Project

PARKER PROJECT ADVISORY BOARD

	Education		Business
1.	B. Dean Bowles, Chairman Deputy State Superintendent Department of Public Instruction	1.	Roger Axtel Vice President Corporate Public Affairs The Parker Pen Company
2.	Richard Dignan Director, Bureau for Vocational Education Department of Public Instruction	2.	Alfred P. Diotte Senior Vice President Administration The Parker Pen Company
3.	Carmen Stout President, Wisconsin Education Association Council	3.	Mitchell S. Fromstein President and Chief Executive Officer Manpower
4.	Timothy G. Quinn Superintendent, Green Bay Public Schools	4.	Paul Hassett Wisconsin Association of Manufacturers & Commerce

The Department of Public Instruction does not discriminate on the basis of race, sex, age, religion, handicap, or national origin.

TABLE OF CONTENTS

		Page
FOREWORD		vii
INTRODUCTION		xi
SECTION I:	**WISCONSIN HIGH SCHOOLS: THE SCOPE AND QUALITY OF, AND CHANGES IN, STUDENT WORK PREPARATION FROM 1970 TO 1980**	1
	Vocational Education Programs	1
	Size of School Districts and Change in Vocational Education	2
	Job-Seeking Skills	3
	Work Experience	3
	Job Placement	3
	Career Exploration	3
	Counseling	4
	Employer Training and Counseling Programs	5
	Business Hiring Practices	5
	Section Conclusion	6
SECTION II:	**EMPLOYER PERCEPTIONS: WORK PREPARATION IN THE HIGH SCHOOL**	8
	Competencies and Job Skills	8
	Vocational Education	8
	Work Experience	9
	Career Exploration	9
	Hiring Practices	9
	Section Conclusion	10

SECTION III:	**EMPLOYER NEEDS: SKILLS FOR INITIAL EMPLOYMENT IN THE 1980's AND 1990's**	12
	Specific Occupational and Job-Related Skills Needed for Initial Employment	12
	Personal Skills Needed For Initial Employment	13
	Future Occupations	13
	Section Conclusion	14
SECTION IV:	**HIGH SCHOOL STUDENTS: ABILITY TO ACQUIRE EMPLOYMENT, KEEP EMPLOYMENT, AND BE SUCCESSFUL ON THE JOB**	15
	Time on the Job	15
	Wages and Job Promotions	16
	Job Satisfaction	16
	Section Conclusion	16
SECTION V:	**HIGH SCHOOL STUDENTS: EMPLOYABILITY CHARACTERISTICS AND SATISFACTION WITH WORK PREPARATION**	18
	Academic Achievement Levels	18
	Vocational Aptitudes	18
	Students and Vocational Programs	19
	Student Satisfaction	19
	Section Conclusion	19

SECTION VI: BUSINESS AND EDUCATION PARTNERSHIPS IN WISCONSIN 21

Types of Partnerships 21

Section Conclusion 21

SECTION VII: CONCLUSION 23

APPENDIX A: WISCONSIN STUDIES 25

APPENDIX B: STUDENT QUESTIONNAIRE 35

APPENDIX C: STAFF FORM 41

APPENDIX D: SCHOOL SURVEY 45

APPENDIX E: MINI-EVALUATION FORM 55

APPENDIX F: POOL FUNDS 59

APPENDIX G: JOB TRAINING PARTNERSHIP ACT (JTPA) 65

APPENDIX H: REFERENCES 75

FOREWORD

Concern has been expressed over the large number of youth who fail to make a successful transition from school to the world of work and over mounting youth unemployment. The needs of business and industry appear to be outdistancing the ability of secondary schools to perform successfully in their work preparation role. Many business people and educators feel that, unless we start planning now for jobs which will be in demand in 1990, students will not be prepared for work and jobs will not be filled.

It has been, and will continue to be, a policy goal of my administration that every young person should leave high school with the basic academic and job skills needed to become self-sustaining in the world of work. Moreover, while I am deeply concerned about the high unemployment rate, I am equally concerned about the growing mismatch between the skills of the young worker and the changing skill needs of business and industry.

The Department of Public Instruction and The Parker Pen Company, through the Parker Fund of the Janesville Foundation, have taken a necessary first step in planning for the improvement of the work preparation role of Wisconsin's secondary schools. Together we have introduced to Wisconsin the first state level business and education partnership which goes beyond an advisory committee role. This partnership has potential statewide impact on vocational education in secondary schools.

Approximately two-thirds of all young people enter full-time employment at or before the completion of high school. The public schools have the obligation to help assure that these young people can fill the available jobs and make a successful transition from school to the world of work. Secondary schools need to address the concerns of business and the changes in the labor market. From these needs spring the goals of the Parker Project.

Phase I of the project, beginning in December of 1981, was designed to provide the information base necessary to enhance understanding of the present performance of secondary schools, to project future vocational and occupational needs of business, and to support planning and decision-making about needed changes. At that time an information base did not exist upon which an accurate assessment could be made of our secondary schools' capacity to meet the needs of business, students, and society in 1990 and 2000.

This information base of Phase I includes Wisconsin data already collected and available and new data where current information is lacking. Five separate efforts are incorporated into the final report of Phase I. A Review of the Literature (#1) is designed to fulfill the need to identify and summarize other state and national research and literature dealing with the transition of the secondary student from school to the world of work. The Stout Analysis of Wisconsin Data (#2) focuses on the role of secondary schools in preparing youth to 2,500 Wisconsin businesses, focuses on employer and employee perceptions of high school work preparation as related to current and future needs. Four Interpretive Essays (#4) is an effort to have the Stout and survey data interpreted by representatives from labor, business, and vocational education. Models of Business Education Partnerships (#5) identifies and describes business and education linkages, cooperative arrangements, and partnerships. The Summary of Phase I: What Is (#6) provides information from each of the five products.

This examination of the current role of secondary schools in Wisconsin and the needs of business and industry was an essential first step in planning for improvement in the role of our secondary schools in the preparation of youth for the world of work.

The six products of Phase I will be disseminated to business groups, educators, secondary schools, the VTAE system, colleges and universities, community and civic organizations, labor, and other policy and decision makers. The planning and goal-setting for Phase II cannot be accomplished until there is an understanding of the current perceptions and practices in Wisconsin.

Phase II began in April of 1983 and is designed to provide a forum for the determination of "What Should Be" for secondary education. The assessment of Wisconsin secondary schools and vocational programs and policy planning and recommendations will be the result of this phase.

An initial step in Phase II was A Futures Symposium on Youth, Work and Economic Productivity: Wisconsin at Risk, held in the fall of 1983 to generate futures thinking and goal-setting and to create a consensus on the role of secondary schools in preparing youth for the world of work and for economic productivity. People from labor, business, education, and government who are knowledgeable about trends, changes and needs of the future were selected for this planning process. Regional Planning Conferences will bring the same groups and decision makers together, in the summer of 1984, to address the future of secondary education, vocational education, business and education partnerships, economic development, and the effects of technology, statewide and regionally, on preparing youth for the world of work.

Phase III, the concluding phase of the Project, will review state policy initiatives, expert thinking and secondary school assessment; and lead to policy development, review, approval and ultimate implementation.

While the Parket Project is addressing the transition of the secondary student from school to work, several factors cause a sense of urgency. First, the public is concerned about the role of education in general. Questions about the quality of education have brought about an apparent crisis of confidence in public schools. Second, the challenges, problems, and opportunities facing our society suggest that the end of the 20th Century will be a period of dramatic change in business, industry, and society. Secondary schools and vocational education will need to keep abreast of these changes if Wisconsin's economy is to keep growing and remain competitive.

Our young people belong in school. With a more meaningful education brought about through the relevance of academic learning to the world of work, more young people will choose to remain in secondary schools. The schools of the future, I believe, will need to stress the basic skills to build the intellectual base needed for future job retraining and changes in employment demands. The schools will need to provide young people with the knowledge that will help them to better understand the needs of their work place and their communities.

Through the Parker Project, we intend to identify the needs of the students, industry, and education and bring them all together into a cooperative working relationship that can enhance the lives of our young people, provide for a more stable, productive state economy through a better prepared labor force, and help insure a more knowledgeable, optimistic, and aware citizenry.

Personally, I am optimistic about the future productivity of our state economy and the future role of our secondary schools in effecting a transition of youth from school to the world of work. The Parker Project is central to this effort and the cooperation and leadership of George Parker, chairman of the board of The Parker Pen Company, has been crucial. Our youth, educators, business and industry, and I are indebted to him. Indeed, we hope this example of leadership is only a beginning for a long and fruitful partnership of education and business and industry in the years to come.

Herbert J. Grover
State Superintendent of Public
Instruction
May, 1984

INTRODUCTION

Phase I of the Parker Project began in December of 1981. The project grew out of concern about the role of secondary schools in preparing students for a successful transition from school to the world of work. At that time it was becoming apparent that, in order to successfully gain employment in the job market of the future, students would be needing different skills and understandings than were currently being taught. The Department of Public Instruction contracted with the UW-Stout Center for Vocational, Technical and Adult Education to build an information base on the scope and quality of secondary school programs that develop the competencies needed in the workplace and services that assist students in acquiring employment. Specifically, the project tried to determine the employability of the students who leave Wisconsin secondary schools. The study also began the process of identifying the skills business and industry expect from secondary school students. This information base was viewed as a critical beginning for decision making about changes in the work preparation role of Wisconsin schools.

The UW-Stout Analysis summarizes the data collected in relation to each of the following objectives identified by the Parker Project.

Objective 1: Determine the scope and quality of the preparation for the world of work offered by Wisconsin's secondary schools in 1970 and 1980.

Objective 2: Determine employer judgments of secondary schools' performance in their work preparation role.

Objective 3: Determine the ability of completers, participants, non-participants, and non-completers to keep employment in the first five years.

Objective 4: Determine employer satisfaction with students who are completers, participants, non-participants, and non-completers.

Objective 5: Determine the capability of secondary school students to acquire employment and succeed in their job experience after leaving secondary school.

Objective 6: Determine what specific occupation, job-related, and personal skills are needed for initial employment in business and industry.

Objective 7: Describe the characteristics of students who were non-completers, participants, non-participants, and non-completers of the vocational program.

Objective 8: Identify the type and scope of business, industry, and education partnerships.

Objective 9: Determine student satisfaction with school work preparation and employer expectations.

A description of the data collection process and the studies used to address the objectives is in Appendix A. In the presentation of the data from the UW-Stout analysis, the Parker Project Board asked that conclusions or recommendations not be developed; rather summary statements along with the supporting data and references be presented. The resulting resources and reference document provided a wide variety of data on secondary vocational education programs, students, and graduates in Wisconsin and the nation. However, because of space limitations, all possible sources of national data could not be reviewed. It is from this document that the following report has been written.

This report has been divided into seven sections based upon the types of information collected:

Section I: Wisconsin High Schools: The Scope and Quality of, and Changes in, Student Work Preparation from 1970 to 1980 describes the changes in Wisconsin vocational education programs from 1970 to 1980. This section includes descriptions of changes in work experience, career exploration, job counseling, business involvement in education, and federal funding practices.

Section II: Employer Judgments: Work Preparation in the High School is a presentation of employer views regarding high school work preparation, the value of work experience and career exploration, and the value of the basic skills, job-specific skills, and work attitudes in securing employment.

Section III: Employer Needs: Skills for Initial Employment in the 1980s and 1990s describes the specific occupational skills, job-related skills, and personal skills needed for initial employment in the future job market.

Section IV: High School Students: Ability to Acquire Employment, Keep Employment, and be Successful on the Job presents data on employment patterns, length of time on the job, and job success and satisfaction for completers, participants, non-completers, and non-participants in high school vocational programs.

Section V: High School Students: Employability Characteristics and Satisfaction with Work Preparation describes vocational education students, dropouts, students in a general program, and those in a college preparatory program in terms of

academic achievement levels, aptitudes, and satisfaction in employment.

Section VI: Business and Education Partnerships in Wisconsin briefly summarizes the types of partnerships found in Wisconsin high schools.

Section VII: Conclusion

The Four Interpretive Essays, The Business and Education Survey Report, and the UW-Stout Analysis use the terms completers, participants, non-participants, and non-completers to describe the amount of schooling and the amount of vocational education experience acquired by secondary students. With this type of division of students, comparisons can be made among the groups in regard to job satisfaction, employability, wage earnings, attitudes toward work, and so on. While these comparisons can yield useful data for schools looking at needed changes for the future, the terms first must have a common definition. A brief definition of each follows:

- Completers - Students in this category have taken a sequence of vocational education courses including a senior-level vocational course which prepares them for entry into employment or advanced vocational training.

- Participants - Students in this group have taken one or more of the courses in a vocational education sequence but have not completed the senior-level course. In addition, they may have taken one or two courses from several different vocational areas.

- Non-Participants - This category includes all students who have not taken any course in a vocational sequence. However, they may have taken one or more of the general education courses related to one or more of the vocational fields. For example, they may have taken industrial arts or general home economics.

- Non-Completers - This group includes those students who left high school before they completed the requirements for a high school diploma.

The UW-Stout data collection process was completed early in 1982. Since that time, several efforts within the Department of Public Instruction have been made to improve work preparation for high school students in the state. The "pool projects" were the first attempt to encourage local school districts to contract with the post-secondary VTAE system to make job-specific skill training programs accessible to all high school youth. Many projects across the state are now part of that cooperative process, which is viewed as a critical link in the successful preparation of students for work (Appendix F).

The Job Training Partnership Act (JTPA) went into effect in 1983-84. JTPA provides federal funding to remediate and train those persons most in need: the economically disadvantaged, including welfare recipients; dropouts; and other youth and adults with serious barriers to employment (Appendix G). The benefits of this act coincide in part with the goals of the Parker Project--providing high school students with the basic education skills, employability attitudes and skills,

and job specific skills necessary to find, obtain, and keep jobs and be productive employes and members of society. While the cooperative efforts between the K-12 and post-secondary VTAE system and the Job Training Partnership Act are not mentioned in the discussions in this report, they have become two of the major forces for change in the role of Wisconsin high schools in the preparation of all youth for the world of work.

Special recognition should be given to Margaret Melick, Betty Gertner, Harold Halfin, and Orville Nelson of the UW-Stout Center for Vocational, Technical and Adult Education for collecting and organizing the Wisconsin data. The original UW-Stout report of data may be obtained by contacting the Bureau for Vocational Education, Department of Public Instruction, P.O. Box 7841, Madison, WI 53707.

Charlotte M. Oinonen
Director, Parker Project

SECTION I: WISCONSIN HIGH SCHOOLS: THE SCOPE AND QUALITY OF, AND CHANGES IN, WORK PREPARATION FROM 1979 TO 1980

Vocational Education Programs

Funding and Programs

Within the past five years, there has been a 56 percent reduction in the number of high school districts participating in federally funded VEA (Vocational Education Act) programs; from 308 districts in 1977 to 175 districts in 1982.

1977 . . . 308 school districts
1978 . . . 292 school districts
1979 . . . 289 school districts
1980 . . . 276 school districts
1981 . . . 222 school districts
1982 . . . 175 school districts

The impact of the reduced federal support is apparent from the data. First, placement services in almost all high schools formally served by the Wisconsin Job Service, as part of this funding, have been curtailed. It is also evident from the data that those schools not using VEA funds to begin with, place very little emphasis on providing placement services to graduates entering the world of work. Second, schools not using VEA funds are less likely to offer a senior level work experience program. At the same time, vocational education programs have received renewed attention, as they have been shown to be extremely effective in aiding the successful transition of students from school to work. For example, the unemployment rate for capstone students within vocational education programs (students having a senior-year work experience as part of their total program) is 5½ percent after graduation and 5 percent three years after graduation.* Those figures compare favorably with a national unemployment rate of over 8 percent and a teenage unemployment rate of 24 percent (July, 1982, Department of Labor Statistics). It thus becomes apparent that federal funding patterns have a great impact on the number of schools offering vocational programs, the job placement and work experiences provided, and the quality of those programs.

* Federally funded vocational education programs with a work experience component are now called Occupational Preparation Programs. These programs involve 9-12 instruction and an Instructional Preparation Program (the work experience component) available to students in grades 11 and 12.

Programs Offered

Data collected by the UW-Stout revealed that the majority of Wisconsin school systems:

- offered industrial education,
- did not offer a health occupations program,
- offered a home economics program that develops basic or job-entry skills,
- offered some type of vocational education program for special needs' students, and
- offered business education programs that were designed to develop job-entry skills.

Only about 10 percent of the school districts contracted with the post-secondary VTAE system, and only about 13 percent contracted with other secondary districts to provide vocational training. (This data was collected before the current "pool projects' began. These projects, funded through the Department of Public Instruction since 1982-83, are an attempt to increase the services and training provided to high school students by interdistrict and K-12/VTAE contracts.)

The data presented clearly indicates that larger school systems had more vocational education programs to offer high school students. Specifically, larger schools were more likely to offer vocational education for special needs students; a full, sequential vocational program; agricultural programs; and vocational programs of all types that emphasize job-entry skill development.

Size of School Districts and Change in Vocational Education

With the exception of small schools (399 students or fewer) a majority of school districts reported an increase in the number of students enrolled in vocational education programs. Changes in the number of vocational teachers, however, depended upon the size of the school district. A majority of districts reported an increase in the number of vocational subjects offered, except for school systems enrolling 400 to 699 students. Also, with the exception of the school systems with 4,000 to 9,000 students, schools reported that support services remained the same. Large schools, however, reported increased participation of business and industry in their vocational education programs. School systems with less than 2,000 students had no change in business participation over the last decade. The quality of equipment and facilities improved during this period; as well as the quantity of supplies and materials used (except for the larger school systems in the latter case). The data presented clearly indicated that larger school systems had more vocational education programs to offer high school students. Specifically, larger schools were more likely to offer vocational education for special needs students; a full, sequential vocational program; agricultural programs; and vocational programs of all types that emphasize job-entry-skill development.

Job-Seeking Skills

In most school districts, job-seeking skills were not taught as a separate course. Instead, these skills might be introduced by a counselor in group sessions or included as a unit in the "Business English" offering. Vocational education graduates, however, perceived their capstone course (vocational education) as most important for learning good work habits, preparing for a job following graduation, and gaining a better understanding of job requirements. Over one-third of these students were members of vocation-related clubs or youth organizations. Almost all of these students felt that activities in the student organizations were an important part of their preparation for the world of work.

Work Experience

Non-federally funded vocational programs, especially in the smaller school districts, were less likely to include a senior level work experience component and less likely to offer academic credit for work experience obtained independently of vocational education courses. When co-op programs were viewed as school-release activities rather than educational programs, public relations problems developed among the school, the community, and the businesses involved.

Most high school students held a job part-time or during summers, and graduates felt that their work experience during high school years had greater value than classroom activities in preparing them for employment.

CETA and school district linkages developed many school to work transition programs. Several of these Wisconsin programs gained national CETA recognition, but were discontinued with the end of CETA funding.

Job Placement

Nationally there is limited emphasis on job placement services and student follow-up in most schools. In Wisconsin, the Job Service has reduced its placement services in nearly every high school it formerly served. The data also showed that those schools not using federal funds for vocational education place very little emphasis on providing placement services to young adults entering the world of work immediately after graduation. Some other types of school and community programs were also being curtailed as a result of general school budget reductions. While slightly over half of the school districts posted job notices they received, only one quarter reported moderate placement efforts, and only 5 percent had extensive job placement services.

At the same time, most students felt a need for greater assistance in making the school-to-work transition, more placement and follow-up services, and more occupational information.

Career Exploration

While only a small percentage of schools offered a broad-based career exploration program, the following data describe activities in Wisconsin high schools:

- 54 percent of the school districts administered an interest survey to all students;
- 44 percent of the schools required a unit for all students on "An Introduction to Vocations;"
- most schools provided career resource materials to students when making career decisions, especially for post-secondary education choices;
- most schools provided some career interest exploration activities;
- 278 of 432 high school districts used the Wisconsin Career Information System (WCIS), an extensive state-wide career information service. It was estimated that 75 percent of the students in these schools used the system; and
- 83 percent of local vocational education coordinators (LVECs) indicated that an identifiable "introduction to vocations" activity was presented to students during or before the ninth grade.

With the end of the fedeal career education fiscal support, the many useful model programs developed through career education research are being discontinued. At the same, the vast majority of sophomores and seniors surveyed in this study indicated a need for more career and job information. Within the constraints of regulations and economic conditions, there is a need for continued business and community efforts to provide more opportunities for students to explore and try out different jobs.

Counseling

Guidance counselors in Wisconsin school districts reported that they counseled students as part of their assignment in 94 percent of the schools. In counseling with students, the activities on which counselors indicated they spent the most time, in order of time spent, are the following:

- helping students decide which college or university to attend,
- helping students apply for admission to a college or university,
- helping students get information about post-secondary VTAE schools,
- helping students identify course(s) to take in order to get into a college or university.

The activities in which counselors spent the least amount of time were the following:

- helping students learn about apprenticeships,
- helping students complete job applications or contact prospective employers,

- helping students find out about jobs available in the community.

While counselors ranked job placement as their fourth most important responsibility, they ranked time spent on job placement last on a list of 14 items.

Eighty-seven percent of the counselors, however, reported that most students receive some vocational counseling. This counseling consisted of making referrals to outside resources for service in an occupational area or for social services; administering aptitude and ability tests, or interest surveys; and/or maintaining an occupational file.

In most school systems throughout the state, college-bound students continue to receive a disproportionate amount of the counselors' time and assistance with completion of college entrance requirements. The data also indicate that some channeling of average to below-average ability students into vocational programs does occur. Dropouts may be offered exit interviews by some school districts as an opportunity to keep channels of communication open and provide referrals to alternative services. For the dropout-prone youth, work experience programs through CETA (now JTPA) or alternative schools, which offer a modified curriculum, may be available in some school districts.

The Stout data indicates that high school students learn the most about college and careers from their families and friends rather than from the school counselor. With the tremendous change affecting the future labor market, and with the emergence of new occupations, the high school student needs up-to-date and accurate labor market information. Guidance counselors and teachers must be aware of the new jobs and have the resources to guide students in preparing for them.

Employer Training and Counseling Programs

The results of a recent National Association of Manufacturers' Study indicate that employers offer a variety of training programs for employes after initial employment. Formal, on-the-job training is frequently provided. Less frequently, before-job training is given. Firms interviewed in Wisconsin indicated there were some job counseling programs within businesses. These programs might include counseling sessions on the job during the initial 12 weeks, provision of career information regarding specific jobs within the company, placement counseling to job applicants describing job requirements and duties, and use of WCIS to identify employes for promotion or training programs.

Some employers have developed remedial math, writing, and communication skills training to raise emlpoye skill levels. However, as a result of low basic skill levels, many youth are not hired and therefore are not able to benefit from employer provided training.

Business Hiring Practices

Employers frequently refuse to hire young people who lack basic academic skills and, therefore, avoid the need to upgrade low-level skills. These employers eliminate the need for remedial training by testing and screening applicants.

However, some employers report that employe selection is made solely on the basis of EEO guidelines and not on applicant skills. The latter may be required to upgrade basic skills.

Section Conclusion

Section I reviews a decade of vocational education programming from 1970 to 1980. As part of his interpretive essay, Dr. Orville Nelson, co-director of the Vocational, Technical and Adult Education center at UW-Stout where the data for this report were collected, reviews his own data and gives some valuable insights. Some of his ideas are summarized below.

From 1970 to 1980 two events, not presented in the data, occurred that had a major impact on secondary vocational education programs throughout this period. The first event came during 1977 and 1978. Elementary and secondary school districts were squeezed by high levels of inflation and state-imposed tax limitations. While the inflation eliminated a considerable portion of these schools' purchasing power, state-imposed tax limitations reduced the schools' capacity to increase resources. At the same time, taxpayers became more reluctant to approve new facilities or any increase in school budgets. As a result, the resources available to vocational education programs remained the same or decreased. In addition, the lack of new facility construction eliminated one major source of new vocational equipment.

The 1960s and early 1970s were years of extensive high school construction. Typically, these facilities included new facilities for vocational programs. By 1980, the equipment purchased in the 60s was more than a decade old. In the meantime, significant changes in technology had occurred in all of the vocational fields. Word processing and computer-based accounting had made extensive progress in the occupations for which business education programs were designed. Computer-assisted design and computer-generated graphics were rapidly being integrated into the occupations related to industrial education. (Team visits during the study to the 12 school districts which did not receive federal funds revealed little use of microcomputers outside of the business education field.) In general, secondary vocational education programs fell significantly behind in the use of microcomputers and other contemporary technology.

The second major event took place in 1980. At that time, there was a significant change in philosophy at the federal level. Funds for education and human services were redirected into other national endeavors. One result was the reduction of Job Service funding. This reduction meant noticeable decreases in the number of high school Job Service personnel available to assist with the placement of high school students. This caused a significant decrease in job placement services. Since placement was one of the weaker links in vocational education programs prior to this change, the reduced level of assistance from Job Service had critical impact throughout the state.

Changes in federal funding patterns also decreased the funds available for planning and implementing career education programs and for the provision of services to the disadvantaged and handicapped students in the CETA programs. Although the level of federal funding for vocational education itself has remained the same, it has not been sufficient to keep pace with inflation or to offset the impact of other funding losses.

Therefore, the data may not present an accurate picture of the present trend in secondary vocational education because of the significant changes that occurred from 1970 to 1980.

> The vocational areas offered in Wisconsin's secondary schools are primarily traditional ones. These include agriculture, business education, home economics, industrial education, and distributive education. Although it is apparent that Wisconsin's economy is shifting in line with that of the national economy to information and service-based occupations, our secondary vocational programs tend to remain based on a production-oriented economy. Programs in the areas of health, information processing, tourism, and services are seldom found in Wisconsin's secondary vocational programs. In addition, electronics, which is basic to many high tech occupations is found in only a few schools. As new technologies are infused into the vocational programs, there will be a critical need for the retraining of vocational teachers. They will need to acquire new skills and new knowledge.
>
> Dr. Orville Nelson
> UW-Stout

Most of the data presented are from the Secondary Vocational Education Evaluation Project, which focuses on the secondary schools receiving federal vocational education funds. These districts represent about one-half of all districts in Wisconsin. Research indicates that vocational education is offered in schools not receiving these funds. However, programs in these schools tend to lack the intensity and scope of the programs in the funded schools. Vocational education programs in the non-funded schools also make significantly less use of advisory committees, follow-up evaluations of graduates, and less formal curriculum development activities. Non-funded schools also place less emphasis on the work experience qualifications of their vocational teachers. It appears that there is significant need to upgrade the scope and quality of vocational programs in secondary schools which have not received federal vocational education funds.

In conclusion, secondary vocational education programs in Wisconsin made significant progress during the decade of the 70s. However, dramatic changes in funding, student population, and the technology used in business and industry which took place late in the decade, suggests that secondary vocational education programs face significant challenges now and in the future.

SECTION II: EMPLOYER JUDGMENTS: WORK PREPARATION IN THE HIGH SCHOOL

Competencies and Job Skills

Interviews with employers in Wisconsin indicated that youth lacked the advanced science and math background needed for today's more technical jobs, satisfactory communication skills, knowledge of job requirements, and appropriate work habits. Employers strongly indicated that in today's high schools, academic content must be made more relevant to the world of work in order to be meaningful for today's students. These employers also perceived the youth of the 1980s to be lacking specific skill competencies in the following areas:

- reading,
- writing,
- mathematics and applications,
- communication skills, specifically grammar, spelling, and speaking,
- discipline, as evidenced by absenteeism and tardiness,
- expectations of the workplace, lack of awareness of what is expected, and
- leadership capabilities.

The interviews indicated that youth do have adequate competencies in entry-level, job specific skills, work at the trade, or vocational program experiences. Salable skills appeared to qualify the student for immediate employment after graduation from high school.

Vocational Education

Vocational education, in general, was perceived as doing an "adequate" to "good" job, and viewed as beneficial to employers both in Wisconsin and the nation. While most employers preferred both employability skills and job-specific skills programs at the high school level, manufacturers felt that the following should be emphasized in order to improve vocational education:

- the basics (reading, writing, mathematics) at the high school and post-secondary level,
- work experience at the post-secondary level, and
- access to vocational education for all high school students not planning on going to college.

While employers could not always differentiate between students who were vocational education completers or non-participants, employers of both types of students did prefer to hire students with a high school vocational background for entry-level employment. The businesses involved in joint activities with vocational education programs graded the need for high school work preparation higher than those not involved in programs.

The majority of employers felt that their company benefited from vocational education and, as a result, disapproveed of reducing the amount of money spent on vocational, technical, or career programs.

Work Experience

The data indicated that employers preferred to hire young people with a general work experience background or students with co-op training over those who lack experience in the work place. In addition, almost two thirds of the respondents to a 1980 Gallup Poll favored having public schools add staff members to help students and graduates secure jobs. By similar margins, superintendents and high school principals opposed this idea.

Career Exploration

It was clearly indicated that a majority of adults and employers in Wisconsin felt that "more" or "much more" emphasis should be placed on career information for high school students. This included helping the youth in elementary and secondary schools to better understand career opportunities in Wisconsin and their own skills and interests in relation to those opportunities.

Hiring Practices

Employers in business and industry expressed a tendency to employ people with work experience of some kind and to prefer hiring secondary-school graduates for entry-level jobs who had completed a vocational education program. In fact, most manufacturers (85 percent) preferred hiring vocational graduates rather than non-vocational graduates for jobs requiring less than a four-year college degree. However, the training directors interviewed in large businesses were not always aware of the high school programs of their employes. Also, for some employers, vocational education training did not make a difference, or the high school diploma was not a requirement. In these cases, the one priority in hiring was equity, not skill, training, or experience.

A high unemployment rate for high school dropouts indicates an employer preference for high school completion, training, or work experience. The much higher unemployment rate for this group could be partially accounted for by their inability to provide work credentials for job interviews. Even positions in manufacturing, construction, marketing, agriculture, and transportation, where most dropouts find jobs, are no longer available to anyone without the proper education and training.

Section Conclusion

Employers do not appear to be entirely satisfied with the performance of secondary schools in preparing students for employment, especially those who hire students without high school vocational training. They feel that students are not acquiring the science and math skills that are becoming increasingly necessary. Many also feel that today's students lack communication skills and are below expected levels in computation skills. A 1980 Gallup poll indicated that the general public shared this concern. The following paragraph from the UW-Stout data reveals the discrepancy between the views of the public and the educators.

> Professionals (educators) sharply disagreed with the lay public on the adequacy of instruction in the basic skills. Only 34% of the respondents to the 1980 Gallup Poll thought that public schools were focusing sufficient attention on teaching the three R's, 61% saw this attention as inadequate, and 5% were undecided. By contrast, 78% of school board presidents, 88% of the superintendents, 90% of elementary school principals, and 81% of secondary school principals saw the attention paid to basic skills as adequate. Only 11% of board presidents, 5% of superintendents, 4% of elementary principals, and 1% of secondary principals saw instruction in the basics as inadequate.

A Phi Delta Kappan poll of March 1982 showed that a substantial number of general public respondents, 65 percent, favored staff additions to bolster vocational programs, while administrators opposed staff additions by a similar margin, 62 percent. It may be that school districts' attempts to justify cost efficiency and accountability practices to the public were not addressing the general concern for a change in the quality of education and adequate opportunities for acquisition of skills for entry into the world of work.

Employers seemed more satisfied in general with secondary vocational education programs than with secondary education as a whole.

Wisconsin employers compare favorably to the nation's employers. A National Association of Manufacturers study in 1981 showed that slightly over 50 percent of the respondents felt they benefited from vocational education and that about 80 percent of manufacturers preferred vocational graduates for positions requiring less than a four-year college degree. Nationally, employers also felt that the schools ought to become more thorough job-training institutions, demanding proficiency in the three Rs while at the same time upgrading vocational programs.

The UW-Stout data indicate that Wisconsin employers are in agreement. The fact that employers feel high school graduates have adequate entry-level skills and attitudes should not be construed as an endorsement of the status quo. Many improvements are indicated in the data as necessary to improving the employability of high school graduates. Clearly, employers are only moderately satisfied with current vocational education, and must therefore take a greater role in its improvement.

SECTION III: EMPLOYER NEEDS: SKILLS FOR INITIAL EMPLOYMENT IN 1980 AND 1990

Specific Occupational and Job-Related Skills Needed for Initial Employment

If Wisconsin business and industry are expected to succeed now and in the future, employers state that schools must emphasize the following job preparation skills for all high school students:

- positive attitude toward work,
- understanding of the value and importance of work,
- knowledge of safe working procedures,
- understanding of the U.S. economic system (supply, demand, inflation, research),
- willingness to learn new skills and the ability to learn them quickly,
- knowledge of business operations and what is required on the job,
- motivation to seek full-time employment,
- concern for quality of work, output of satisfactory amount,
- basic skills, including mathematics (trigonometry and calculus), reading, and writing (technical writing, punctuation, and capitalization),
- communication skills (listening, speaking, and leading group discussions), and
- problem solving skills.

Business will expect the new employe of 1990 to have some knowledge of how a business operates, how participatory management works, and how they fit into these roles in the work place. Job-related abilities which should be taught in high schools, according to employers and the general population nationally, include:

- knowing how and where to look for information about jobs one has or would like to have,

- interviewing for different job positions when necessary,
- knowing what kind of work one wants to do, and
- being able to complete and understand employer work forms.

While one of the principles of vocational education is to have programs based on a sound basic education, the data indicate that basic skills are now more important for getting a job than specific occupational skills. It has been shown that students need some mastery of basic skills prior to entering high school vocational programs. However, it has also been shown that vocational programs taught in conjunction with academic programs provide motivation for some students to learn the basic skills to remain in school, and to strive for higher levels of achievement.

The data indicate that small businesses will create most of the new jobs. Therefore, entrepreneurship skills must become part of every vocational education curriculum. It is known that many small businesses fail, not because of the lack of technical skills, but because of a lack of managerial and business skills.

Personal Skills Needed for Initial Employment

Employers would like to see graduates and new employes exhibit the following personal skills:

- courtesy and friendliness (consideration and kindness toward others),
- pleasant personal appearance (neatness, cleanliness, appropriate dress and grooming),
- dependability (promptness and reliability in attendance),
- responsibility (willingness to accept work and to do it well),
- cooperation (ability to work in harmony with others),
- initiative (ability to plan and direct own work and seek assistance when necessary), and
- judgement (ability to make sound decisions).

The literature for 1970 and 1980 suggested that these same personal skills are desired by employers. However, for 1990, the ability to participate as part of a team to achieve business or industry objectives or purposes will be an additional personal quality crucial to initial employment.

Future Occupations

The average number of jobs projected for 1990 is 2.57 million, with a projected labor force of 2.61 million. The service industries, including recreation and health, will have increased 33 percent by 1990. Beer, cheese and other food and kindred product businesses will have grown by 4 percent. Non-electrical machinery

industries will have 25,000 new jobs, a 15 percent increase. Paper and allied industries will grow 8 percent because of the competition from plastics and the electronic transmission of information. The construction industry will experience a 16 percent increase in employment by 1990 through commercial and industrial construction. Residential construction, however, will show less improvement. Government employment will increase by 11 percent or only one half the rate experienced between 1970 and 1980. Whether the arts industry and other transportation and equipment manufacturers will grow is uncertain (Gosling, DILHR, 1982).

During the 1970-1980 period, Wisconsin, Minnesota, and Michigan gained 9,000 manufacturing jobs and 1,220,000 service sector jobs. Also during this time, while Wisconsin had a 9 percent rate of growth in manufacturing, the national rate was only 5 percent.

Nationally, the number of manufacturing jobs is now declining and will continue to do so through 1990 and beyond. As the economy moves from producing goods to providing services, the service industry in Wisconsin will increase 33 percent by 1990. High thought-content businesses may account for the greatest share of growth in the number of jobs available. Among these are businesses involved in high technology, medical laboratories, robotics, computers, computer software, and missiles.

Small businesses, firms with 20 or fewer employes, created two thirds of the new jobs during the period from 1969 to 1976. Eighty percent of the new jobs were created by firms with less than 100 employes. While Wisconsin has been less dependent upon the growth of new businesses than other states, new jobs created by small businesses will be an important part of Wisconsin's economic future.

Section Conclusion

Entry-level employes will be poorly prepared for the jobs of the future unless work preparation is changed. During a recession, persons lacking skills may be the first to be laid off. The decline in the number of youth entering the labor force in the 1980s may help solve some of the unemployment problem, but will not help those who are unemployable due to the lack of skills and undeveloped work habits. Concern for the future economic development of the state and future unemployment levels will continue as long as jobs of the future are expected to require even more skills than in the past, and as long as youth at the secondary level do not attain the entry-level employment skills asked for by the business community. The need for improved communication between business leaders and educators across the state will be critical to the adequate preparation of youth for work.

SECTION IV: HIGH SCHOOL STUDENTS: ABILITY TO ACQUIRE EMPLOYMENT, KEEP EMPLOYMENT, AND BE SUCCESSFUL ON THE JOB

Completers of vocational education programs surveyed had a higher rate of employment upon graduation (69-77 percent) than participants in vocational programs (57-70 percent) or those who had no vocational courses (48-60 percent). In other words, the capacity of high school students who had completed vocational programs or a portion of these programs to obtain employment was very great. Their unemployment levels were consistently one third to one fourth the teenage unemployment rate in Wisconsin. Their unemployment rates were also consistently under that of the general population. In contrast, students who did not complete high school had a markedly more difficult time gaining employment, and typically worked for below average wages.

The data indicated that a vocational high school diploma was valuable and benefited individuals in the following ways:

- better chances of securing entry-level employment,
- greater potential for advancement,
- greater flexibility (lateral movement), making job assignments more interesting, which may aid in job retention,
- greater average salary earnings than non-completers, and
- greater lifetime income expectations.

Time on the Job

In general, the data indicated that graduates of vocational education programs:

- had fewer part-time jobs than graduates of academic programs and slightly more than students from a general program;
- held fewer jobs after graduation and stayed on jobs longer than other groups; and
- were working three and four and one half years after high school at a higher rate (75.46 percent) than other groups.

Dropouts stayed noticeably less time in current jobs than the other groups, remaining for one month to one year. Dropouts also had more difficulty locating jobs. Thirty-six percent of the dropouts who were out of high school five years had been on their current jobs one year or less, compared to the 17-22 percent of the capstone graduates and 11-23 percent for the participants and academic students.

There were no significant differences, however, between groups in the number of full-time jobs held since graduation.

Wages and Job Promotions

Completers of vocational education programs had the highest average hourly wage ($3.41 to $4.03), the highest percentage (26-33 percent) of job promotions, and the highest rate of lateral mobility (20-21 percent). The hourly wage of male graduates was higher than that of females in all vocational programs. Male graduates from vocational programs had higher hourly wages than males from academic programs for post-high school, entry-level jobs. Female graduates, however, had lower salaries than females from academic programs. This disparity increased three years after graduation. Dropouts, of course, had the highest percentage of students earning less than the minimum wages of the other groups.

Job Satisfaction

Vocational education graduates were more likely to feel satisfied with their jobs as a whole and with their opportunities to use post-secondary training and education than were the general and academic students in vocational programs. Job satisfaction and job retention may be interrelated factors. Job satisfaction also eventually relates to salary as well as opportunities within a business.

Section Conclusion

Unfortunately, most of the data available on Wisconsin high school graduates are for those students who have completed a vocational education program or who have participated in a course or class. The mini-evaluations of the UW-Stout project and the student survey were an attempt to provide additional data in order to make accurate comparisons among the completers, the participants, the non-completers and the non-participants.

However, the process of comparing employment patterns of students from various types of programs may not provide an accurate assessment of their employability. First, graduates of vocational programs are more likely to seek employment immediately after high school than are the students from the academic or college-prep programs. Similarly, students who complete a vocational education program are more likely to look for full-time employment after leaving high school. It is logical, then, that vocational graduates should show a higher employment rate immediately after graduation and a higher stability rate for the next three to five years. Graduates of academic programs should have employment records showing more part-time, and less full-time, employment. Graduates of vocational education programs should leave with the ability to obtain employment immediately, retain a job, advance on the job, and have job satisfaction. Perhaps the data

indicate that both programs are succeeding in their objectives, and that the objectives have little to do with the employability skills of the high school graduate.

SECTION V. HIGH SCHOOL STUDENTS: EMPLOYABILITY CHARACTERISTICS AND SATISFACTION WITH WORK PREPARATION

Academic Achievement Levels

Students in academic programs had the highest performance on aptitude achievement tests and reported the highest high school grades (B and B+ averages). Students in vocational programs reported the next highest grade point averages but had significantly lower scores on achievement and ability tests than students in academic programs. Those students in general education programs report slightly lower grades than the vocational education students. Persons with a GED had aptitude and achievement scores higher than those of the dropout group, but lower than those of the academic groups. Dropouts had the lowest aptitude and achievement test scores. In fact, for the Armed Forces qualification tests, dropouts consistently had the lowest scores on the general aptitude, electronics, mechanical, and administrative tests. A 1977 Wisconsin study reported that dropouts had grade point averages ranging from A to F, with a median grade of D. Reading ability also seemed to vary with individual levels of educational attainment. High school graduates had median-grade level reading scores about two grade levels above those of dropouts.

Vocational Aptitudes

While there were considerable differences between the achievement levels of academic, general, and vocational students and dropouts, there were also great differences among the ability levels of students in various vocational fields and related occupations.

Graduates working as cooks, waiters, buspersons, tailors, leather workers, earth-moving equipment operators, janitors, farm hands, and unskilled laborers had below average academic and technical aptitude scores. Except for students in office occupations, bookkeepers, and lab or medical technicians, the English competencies of graduates in occupational areas were below the average for the total group.

Similarly, graduates in mechanics had lower than average academic, verbal, and quantitative test scores, while lab technicians had the highest academic and technical aptitude scores, and graduates in electronics and electricians had high technical aptitude scores.

Students and Vocational Programs

Who takes the vocational education program? It is estimated that, for school districts across the state, an average of about 45 percent of the students in a general program enroll in a junior or senior-level course while only about 21 percent of the students in the college preparatory sequence enroll in any vocational education courses as juniors or seniors. Interviews with students conducted in the six school systems participating in the mini-evaluations revealed that it was difficult for students in the college preparatory sequence to find space in their schedules to enroll in vocational programs. In some instances, counselors actively discouraged them from enrolling in these courses. It was found that, as more emphasis was placed on the basic skills, it became increasingly difficult for students in general and academic programs to take vocational courses.

Because of the diverse nature of vocational programs and school record-keeping systems, it was not possible to obtain exact data on the number of students completing vocational programs, in the non-federally funded school districts.

Students in high school vocational programs tend to have more work experience during high school. The median level of work experience reported by high school students in vocational programs in 1980 was about 20 hours, compared to the 17 hours of academic students. Also, it must be noted that high school students in vocational programs were more likely to have jobs that related to their studies and career choices.

Student Satisfaction

Wisconsin and national data clearly indicated that students who completed a full vocational program were more confident of their own abilities and tended to be more satisfied with their high school work preparation. They indicated they had gained in high school an understanding of the value of work and the importance of getting along with others, and knowledge of job-seeking and job specific skills. These graduates were also more satisfied with their jobs and felt they had more opportunity to use their previous training than their counterparts. The data indicated that the students with less vocational preparation tended to be less satisfied with jobs and high school work preparation in general. The high school dropouts disliked school entirely, even though many did not feel that it was a waste of time or too difficult for them.

When students were asked what could be improved in their high school training, they indicated a need for more information and help with career planning and job placement. They also expressed a desire for classroom speakers from the business community and more business field trips in order to better relate their school experiences to the world of work.

Section Conclusion

The capabilities of students in vocational programs are unique. They tend to have lower grades than students in college-preparatory programs and have less interest in going on to post-secondary education immediately after high school. If they do further their education, they tend to enroll in a program related to their vocational

field. National data indicate that students in vocational programs come from families where the father has less educational attainment than fathers of students in academic and general programs. Orville Nelson, UW-Stout, states this about these statistics:

> The unique capabilities of students in vocational programs should not be a surprise. Data in this report and my experience in school evaluations indicate that students who perform well on academic tasks are counseled and encouraged to enroll in academic courses. Sometimes they are discouraged from taking vocational courses; and, in many instances, there is not room in their school schedules to fit a vocational course. Of the students who remain, vocational education is more attractive to those who have a clear career goal. They have the most motivation to complete the work required in these courses.

Vocational education graduates do have an edge in the labor market. They seem to feel more familiar with job-seeking techniques, and to have more knowledge of the tools and equipment used on the job. They are also generally satisfied with their jobs and high school work preparation. However, it is important to ask if expectations for these graduates are high enough. These students accomplish the goals and objectives that are set for them. Are these goals and objectives the ones that will enable secondary students to successfully meet the employment and technological needs of our society in 1990 and 2000? All must answer this question.

SECTION VI: BUSINESS AND EDUCATION PARTNERSHIPS IN WISCONSIN

A variety of business and education partnerships exist in Wisconsin, ranging from informal or informational arrangements to more formal agreements, such as contracts for services. While schools, in general, are gradually beginning to seek various kinds of private sector support, the smaller, more rural schools are still apt to have business involvement limited to vocational education advisory committee membership. However, more schools report that the level of business and industry participation has remained unchanged since 1970. Only under the auspices of career education or specific vocational education programs, has school and business cooperation expanded to any degree over the last decade.

Types of Partnerships

The types of partnerships most often found in Wisconsin were: work experience; job shadowing; career fairs; plant and office tours; work simulation; equipment loan, donation, or purchase; business speakers; adopt-a-school programs; advisory committees; career exploration programs; and co-op programs. The co-op or some type of work experience program appeared from the data to be the major type of business and education partnership for the majority of school districts in the state.

Students in these programs, however, expressed a further need for business involvement in providing speakers, field trips, or information on job seeking and keeping skills. Many businesses, at the same time, expressed a willingness to provide more work experience opportunities for students, classroom instruction, and job-seeking counseling. Almost one-fourth were willing to have their equipment used for public vocational training programs.

Many of the nation's major industrial firms and large corporations have established educational liaison departments to meet the need for creation of working relationships with the educational system.

Section Conclusion

Even with business and education's renewed interest in building partnerships to provide the kinds of programs students need to successfully enter the world of work, relatively little is being done in most areas of the state. Wisconsin data showed that nine out of ten school districts rarely received or used loaned or donated equipment from local businesses. One out of ten school districts had a student shadowing program and fewer than that used instructors from business and

industry for specific units or classroom lessons. Also, less than half of the schools either did not use or seldom used business representatives on advisory committees. And, of those school districts that did have advisory committees, nine out of ten of the advisory committee chairpersons felt that their committees needed better representation from the employing community. Eight out of ten of the districts reported that school staff did not even minimally serve on community or business development committees.

While the data presented within the original UW-Stout report indicated a slight increase in the involvement of business and industry with education over the last decade, there appeared to be a great need to expand and improve these partnerships and to create new ones. As David E. Horn of Kearney and Trecker suggests:

> The new surge to request business involvement may be a result of funding cuts rather than a true desire on the part of education to impove, update, and create more relevant curriculum and partnerships with business and industry. If the real desire for a true partnership with business is not present, it is no wonder that industry is often reluctant to become more involved with education. Advisory committees, actively made up of local business and industry leaders is one way business and education can become true partners in seeking new ways to better prepare students for the world of work.

SECTION VII. CONCLUSION

Wisconsin's secondary vocational programs appear to do an adequate job of preparing students for the world of work. The data in this report show that students who take a vocational program do acquire competencies that are important for employment, have an edge in the hiring process, and tend to have more job stability. Although high school vocational programs are performing well in preparing young people for jobs, there are some definite problems with the vocational preparation of all students.

- Only about 15-18 percent of Wisconsin's high school students complete a vocational program.
- High ability students may be discouraged from enrolling.
- College track students often do not have time for vocational courses.
- Counseling, guidance, and placement services are inadequate in most schools.
- Work experience programs are not available to many students desiring them.
- There is a lack of competency reporting systems.
- Vocational equipment in many schools is outdated.
- Course content is becoming less relevant to students and the work place as the influx of new teachers has slowed and funds for inservicing continuing teachers has declined.

The problems facing vocational education are great. Only with a strengthening of the partnership of education with business, combining mutual reliance, involvement, and commitment can schools adequately meet the challenges of the future.

APPENDIX A

WISCONSIN STUDIES

The Parker Data Collection Project
The Secondary Vocational Education Evaluation Project
The Non-Completers' Study
The Evaluation of Secondary Vocational
Education Delivery System

Parker/DPI Data Project

Gertner, Betty; Melick, Margaret; Halfin, Harold; and Nelson, Orville. Parker Data Collection Project. Menomonie, UW-Stout. Center for Vocational, Technical and Adult Education, 1982.

The purpose of this project was to assemble data related to each of the objectives and questions identified by the Parker Project. To accomplish this, project staff members drew heavily upon research and evaluation studies which had already been carried out. These studies are referenced in this report.

In some instances, additional data was needed on the non-funded federal vocational education programs in Wisconsin's secondary schools. By June 1982, all of the secondary schools which received federal vocational education funds had been evaluated by the Secondary Vocational Education Evaluation Program (Dale and Klitzke). However, approximately 160 secondary school systems had not participated in federal funding and, as a result, had not been evaluated.

In a previous project, however, Evaluation of the Secondary School Vocational Education Delivery System in Wisconsin (Halfin, Melick, and Nelson, 1981), a stratified random sample of six non-funded secondary systems had been evaluated. Since this was a relatively small sample, it was decided to do an additional evaluation. Of six non-funded vocational education programs, two small (999 or fewer students in K-12), two medium-sized (1,000-2,999 students), and two large school systems (3,000 or more students) were selected for this portion of the study. Because most large school systems do receive federal vocational education funds, the number of medium-sized and small school districts in the sample were selected to represent a variety of geographic regions in the state.

In each of the six school systems, staff and students completed a brief survey form and had a two-day, on-site visitation (See Appendices B, C, D, E).

Another data collection activity, the school survey, was carried out as a part of this study. The instrument was designed to obtain information on topics for which data were not readily available or did not exist. Respondents to the survey were asked to indicate how their programs had changed during the 70s, the types of students who enrolled in vocational education programs, and the degree to which their students had access to vocational education programs. The response rate to this survey was better than 85 percent.

A small number of employers was also interviewed as a part of this study. Employers of graduates from each of the six non-funded schools were interviewed concerning the adequacy of preparation of these employes, as was a sample of employers in the Milwaukee area. The information from these interviews was also used to assist the Department of Public Instruction in designing its business-education survey.

Secondary Vocational Education Evaluation Project.

Dale, Dorothy; Klitzke, Elizabeth; Larson, Charlene; and Gertner, Betty. Secondary Vocational Evaluation Project. Menomonie: UW-Stout, Center for Vocational, Technical and Adult Education, 1977-82.

This project was developed to provide an evaluation system for secondary school vocational education programs. The evaluation includes comprehensive self-study and on-site reviews by an evalaution team. Evaluation data are collected from students in academic and vocational programs, graduates, employers, and staff.

This evaluation system was applied only to the secondary vocational education program that receives federal vocational education funds during a five-year period. Individual school districts scheduled their evaluations to coincide with other all-school evaluations such as North Central and to meet curriculum improvement schedules.

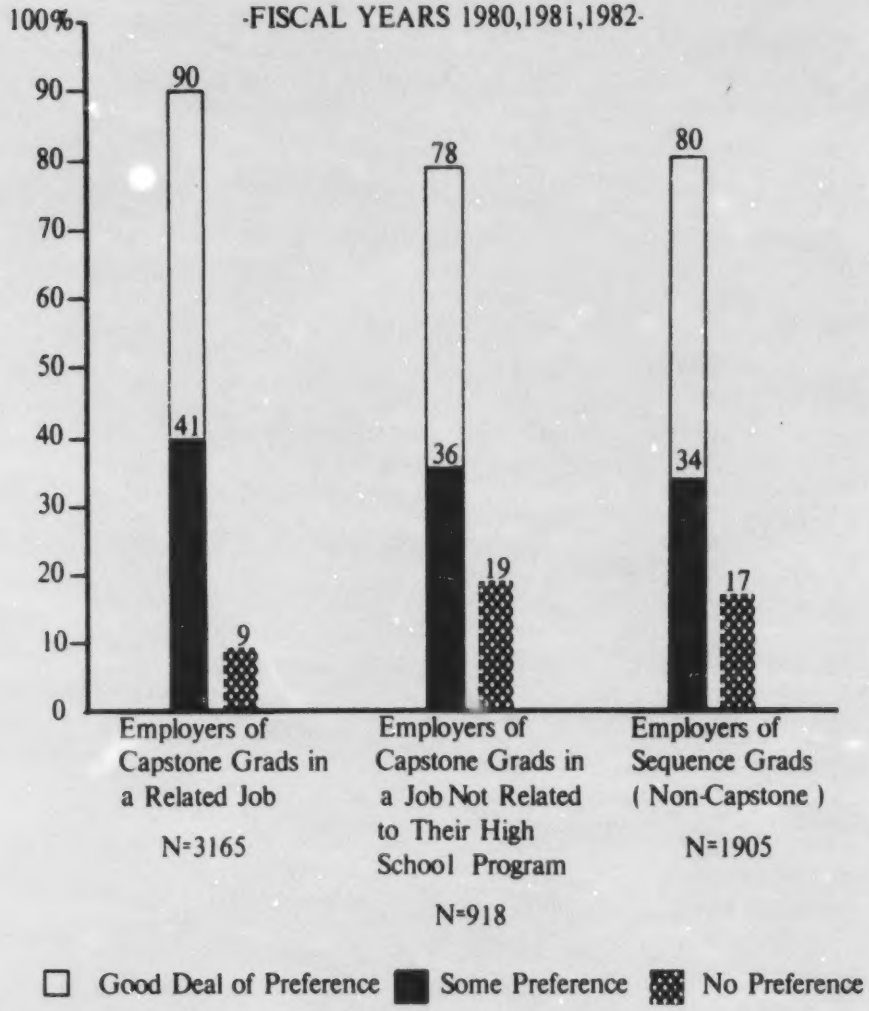
During 1977 to 1982, vocational programs were evaluted in 244 schools. At the end of each year the self-evaluation data were merged with the on-site reviews, and were then summarized in annual composite reports. The data presented in the UW-Stout report are from those composites.

A follow-up study of the impacts of this evaluation process indicate that the process is valid and has significant impact on curriculum and instruction in secondary vocational programs.

Four of the tables from this report are included in the following pages.

EMPLOYERS

EMPLOYERS SHOW PREFERENCE FOR HIRING VOCATIONALLY TRAINED GRADUATES



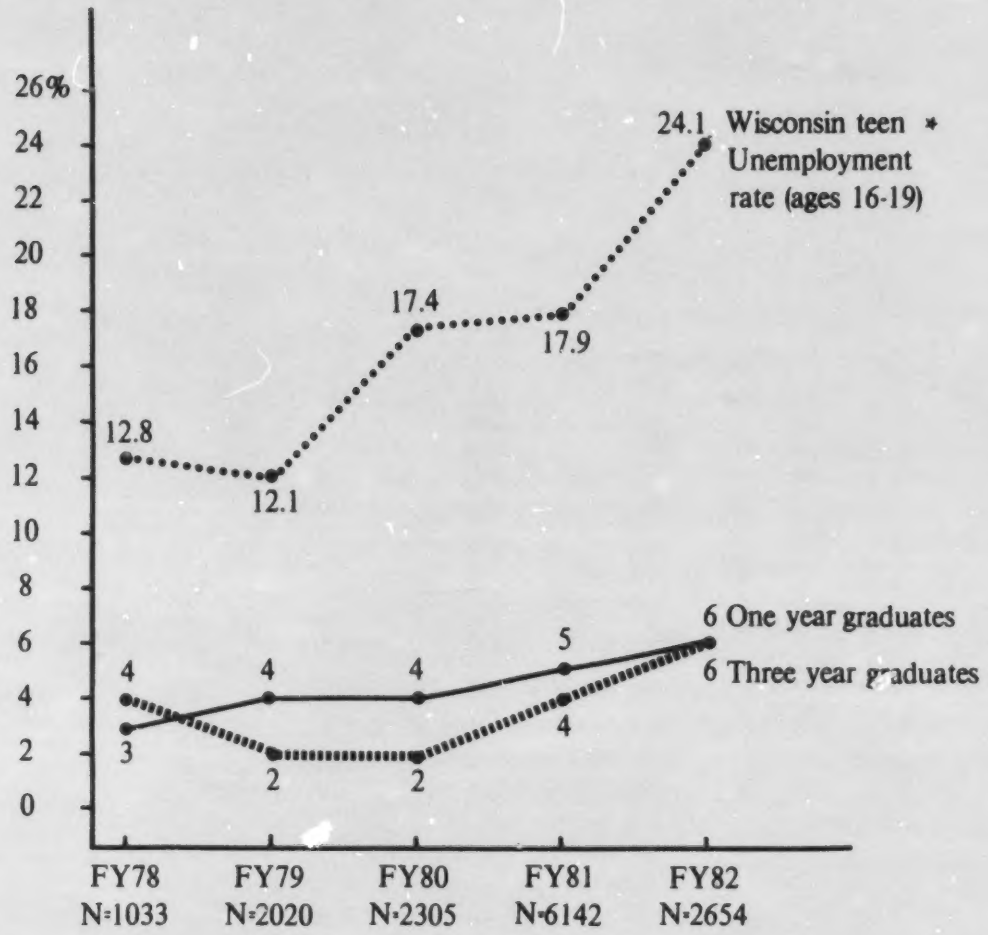
Employers were asked if, from past experience, they had a preference in hiring persons with high school vocational training.

Aggregate response data were segregated according to employers of capstone graduates in a related job, non-related job, or sequence graduates.

Employers responding during the last three years of Cycle I gave the highest percentage rating (40% *some preference,* 50% *a good deal of preference*) to capstone graduates working in a related job, followed by sequence grads (80%) and capstone grads employed in a job not related to their high school program (78%), respectively.

GRADUATES

UNEMPLOYMENT RATE OF CAPSTONE GRADUATES BOTH ONE YEAR AND THREE YEARS AFTER GRADUATION



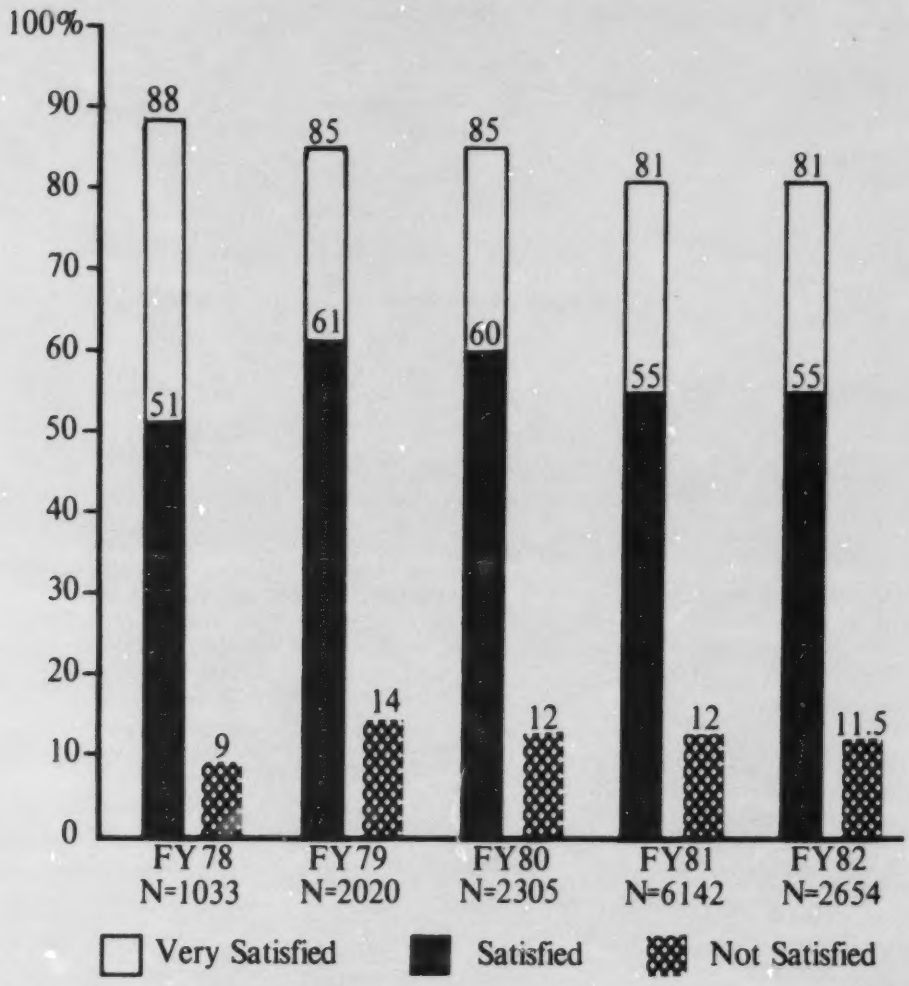
* Source: Bureau of Labor Statistics, Chicago (Annual Average)

The unemployment percentage for capstone graduates both one and three years after graduation has remained consistently low throughout the five years of Cycle I, ranging from a low of 2% (capstone three-year grad, FYs 79 and 80) to a high of 6% (both groups FY82).

During this same period of time, the Wisconsin teenage unemployment figure has ranged from 12.1% (FY79) to a high of 24.1% (FY82).

GRADUATES

CAPSTONE GRADUATES EXPRESS SATISFACTION WITH HIGH SCHOOL VOCATIONAL TRAINING

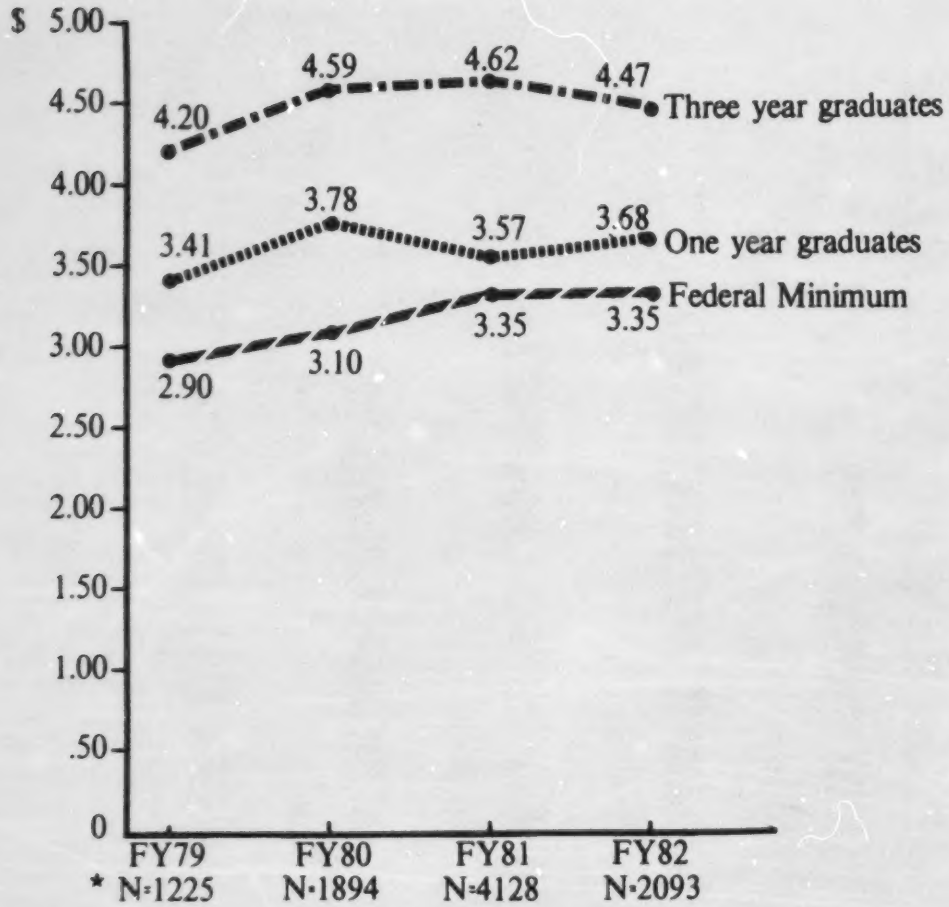


Vocational graduates express a consistent measure of satisfaction with their high school vocational training throughout the five years of Cycle I.

While there is some variation in the percentage of satisfaction shown over the five years, in each case, over 8 out of 10 graduates responded that they were *satisfied* or *very satisfied* with their vocational training.

GRADUATES

CAPSTONE GRADUATES INDICATE HOURLY WAGES EARNED



★ N = **Employed** Graduates, Full and Part-time

While capstone graduates three years after graduation are earning more in each of the last four years of Cycle I than capstone graduates one year after graduation and both capstone groups are earning considerably more than minimum wage, the last two FYs of the cycle display decreasing wages for both groups.

Non-Completers' Study.

Kumar, Vasant and Bergstrand, Joy. High School Non-Completers: 1967, 1972, and 1977. Madison: Wisconsin State Advisory Council on Vocational Education, 1978.

This study was conducted for the Wisconsin Advisory Council on Vocational Education. Council members assisted the researchers in identifying the questions for a follow-up survey of high school dropouts who have been out of school one, five, and ten years in counties with higher than average dropout rates. School districts were randomly selected from these counties to provide a sample of 400 dropouts.

Approval was obtained from the district administrators in each of the participating districts to have a school staff member conduct telephone interviews with the dropouts and be a part of training sessions for this purpose.

Major results appropriate to this study are reported as related to the objectives.

Evaluation of Secondary Vocational Education Delivery System.

Melick, Margaret; Halfin, Harold; and Nelson, Orville. Evaluation of Wisconsin's Secondary Vocational Education Delivery System. Menomonie: UW-Stout, Center for Vocational, Technical and Adult Education, 1981.

This study was funded by the Bureau of Vocational Education by the Wisconsin Department of Public Instruction. The purpose was to evalaute the secondary vocational education delivery system in Wisconsin and to develop a series of recommendations to improve this system. Data from the Secondary Vocational Education Evaluation Project was used to define the capacity and capability of secondary vocational education programs in schools which received federal vocational education funds. Six secondary school systems which did not receive federal funds were visited to identify the scope and characteristics of the secondary vocational programs offered in these schools. In addition, all school district administrators and local vocational education coordinators were surveyed to identify current and anticipated needs of secondary vocational education programs. The response rate for this survey exceeded 70 percent. The data were subsequently used by the project's advisory committee to develop a series of recommendations for the Bureau of Vocational Education.

APPENDIX B

STUDENT QUESTIONNAIRE

Please respond to the following statements as they relate to you and your high school courses.

1. I am: (1) __Male (2) __ Female

2. The grade I am in is:

   (1) __ 9th.
   (2) __ 10th.
   (3) __ 11th.
   (4) __ 12th.

3. Are you aware of the career preparation programs in your high school, which prepare you for jobs after high school, and the objectives or goals of these programs?

   (1) __ Yes.
   (2) __ Some.
   (3) __ No.

4. What general category of courses are you taking in high school? *(Check the most appropriate response.)*

   (1) __ College Preparation
   (Background courses such as math, English, science, etc., needed to enroll in college.)
   Go to Question 5.

   (2) __ General Education
   (General sequences of courses not related specifically to entering college or getting a job.) Go to Question 5.

   (3) __ Vocational Education
   (Career preparation courses designed to acquire skills needed in gaining a job after high school graduation.) Go to Question 6.

5. Would you have considered enrolling in a career preparation or vocational training program, if one directly related to your career plans had been available? *(Note: A career preparation program is one that prepares you for entering a job after you leave high school.)*

   (1) __ Yes, Go to Question 12.
   (2) __ No, Go to Question 13.

6. This is how I feel about the career preparation I am receiving at present.

   (1) __ I am very satisfied.
   (2) __ I am satisfied.
   (3) __ I am unsatisfied.
   (4) __ I am very unsatisfied.

7. I would rate my instructor's knowledge of the world of work:

   (1) __ High--knows a lot about occupations.
   (2) __ Average--knows something about occupations.
   (3) __ Below average--knows very little about occupations.
   (4) __ I don't know--we never talked about occupations.

8. Instructors in my career preparation courses have used a variety of teaching methods such as: *(Check all that apply.)*

   (1) __ Lecture
   (2) __ Discussions
   (3) __ Films
   (4) __ Field trips
   (5) __ Demonstrations
   (6) __ Role playing
   (7) __ Outside speakers
   (8) __ Learning packages
   (9) __ Project activities

9. Instructors in my career preparation courses presented course content in a form that helped me to learn.

   (1) __ Yes, most of the time.
   (2) __ Yes, some of the time.
   (3) __ No.

10. My on-the-job training was directly related to classroom instruction.

    (1) __ Yes.
    (2) __ Only occasionally.
    (3) __ No.
    (4) __ I have not had on-the-job training.

. . . Over Please . . .

11. I rate my high school career preparation program in terms of preparation for an occupation as:

(1) __ High--it will help me find or keep a job.
(2) __ Average--it may help me find and/or keep a job.
(3) __ Low--it will not help me find and/or keep a job.

12. The area where my career interest lie is:

(1) __ Agriculture
(2) __ Business & Office Education
(3) __ Distributive Ed. (Sales & Mktg.)
(4) __ Health Occupations
(5) __ Home Economics
(6) __ Industrial Education
(7) __ Other _____

13. How did you happen to select the program (category or courses) checked in Question 5? *(Check all that apply.)*

(1) __ Preparation for college
(2) __ Had a special interest
(3) __ Influenced by counselor
(4) __ Influenced by parents
(5) __ Preparation for vocation (job)
(6) __ Just exploring
(7) __ Don't know why
(8) __ Just placed there
(9) __ Other _____

14. During high school I have learned about: *(Check all that apply.)*

(1) __ new (emerging) occupations
(2) __ male dominated jobs which females can now enter
(3) __ female dominated jobs which males can now enter
(4) __ occupations which have many job opportunities
(5) __ occupations which are overcrowded with workers and applicants
(6) __ post-high school training opportunities related to my career goals
(7) __ job alternatives related to my career goal

15. I am a member of the following career related student organizations: *(Please list.)*

(1) _____
(2) _____
(3) _____
(4) __ None. (Go to Question 17.)

16. The career related organizations of which I am a member meet:

(1) __ frequently
(2) __ usually
(3) __ sometimes
(4) __ rarely
(5) __ never

17. I have previously filled out a questionnaire or survey about my career interests.

(1) __ Yes
(2) __ Not sure
(3) __ No

18. Last year I met with a counselor to discuss my career plans:

(1) __ More than five times
(2) __ Four or five times
(3) __ Two or three times
(4) __ Once
(5) __ Never

19. I would rate my counselor's knowledge of careers that relate to my interests:

(1) __ High--knows about most occupations
(2) __ Average--knows about some occupations
(3) __ Below average--knows very little about occuapations
(4) __ I don't know--we never talked about occupations

49 . . . *Next Page Please* . . .

20. Following high school, I plan to:
(1) __ go to work. *(If checked, go to #21 and complete.)*
(2) __ go to school. *(If checked, go to #22 and complete.)*
(3) __ other. *Explain* _____
_____
_____
(If checked, you have completed this survey.)

21. These items refer to your immediate post-high school job. *(Check all that apply.)*

(1) __ I already have found a job.
(2) __ I plan to work in a job related to my high school vocational program.
(3) __ I plan to work in a job which is not related to my high school vocational program.

22. These items refer to your immediate post-high education plans. I plan to enroll in an education program: *(Check all that apply.)*

(1) __ related to my high school vocational program.
(2) __ not related to my high school vocational program.
(3) __ in a vocational school one-year diploma program.
(4) __ in a vocational school two-year associate degree program.
(5) __ in a four-year university.
(6) __ in an apprenticeship program.
(7) __ other. *(Please explain.)*
_____
_____
_____

24. Please select the category which best describes your average grades.

____1. A average
____2. B+ to A- average
____3. B average
____4. C+ to B- average
____5. C average
____6. C- average or below
____7. Enter your cumulative grade point average if known _____

23. What suggestions do you have for improving the career preparation program in your school? _____
_____
_____
_____

THANK YOU FOR RESPONDING.

APPENDIX C

STAFF FORM

Please respond to the following statements as they relate to your involvement in a career preparation program. Your thoughtful responses will aid in improving your programs.

1. My present primary position is:

   (1) __ Instruction.
   (2) __ Counseling (advising).
   (3) __ Administration/Coordination.
   (4) __ Other_____

2. Do guidance, administrative and instructional personnel work together in identifying students' needs and interests?

   (1) __ No
   (2) __ Little
   (3) __ Moderately
   (4) __ Extensively

3. As a staff member, I feel I have input in the following program activities: *(Check all that apply.)*

   (1) __ Identifying student's needs and interests.
   (2) __ Identifying facility/equipment needs.
   (3) __ Planning for shared programs with other districts.
   (4) __ Developing philosophy, goal and objective statements.
   (5) __ Career preparation program planning.
   (6) __ Establishing budget allocations.
   (7) __ Career preparation program evaluation.
   (8) __ Identifying and using an advisory committee.

4. As a staff member, I feel I have input in the following course activities: *(Check all that apply.)*

   (1) __ Identifying AV and other media needs.
   (2) __ Updating curriculum.
   (3) __ Developing task analyses.
   (4) __ Identifying & utilizing community resources in my classes.
   (5) __ Other _____
   (6) __ Other _____

5. Are the career preparation courses sequentially structured into programs in your school? (i.e., are there courses at 10th and 11th grade that lead into the senior level course that prepares students for employment)

   (1) __ Yes
   (2) __ No

6. Are there attainable and measurable objectives for the district's total career preparation program?

   (1) __ Yes
   (2) __ Not sure
   (3) __ No

7. Are there attainable and measurable objectives for the career preparation courses which you teach, administer or provide guidance?

   (1) __ Yes
   (2) __ Not sure
   (3) __ No

8. Are you familiar with your school's plan for identifying special needs students?

   (1) __ Yes
   (2) __ Not sure
   (3) __ No

9. Are additional services provided for special needs students (other that special education)?

   (1) __ Yes
   (2) __ Not sure
   (3) __ No

. . . *Please turn the page.* . .

In this final section you are asked to give a judgemental rating of the strengths and weaknesses of certain aspects of your school's career preparation program. Please respond using the following key:

5=Very Strong; 4=Strong; 3=Acceptable
2=Weak; 1=Very Weak

	(Circle One) VS S A W VW
10. Putting goals and objectives to use in the classroom	5 4 3 2 1
11. Appropriate and adequate facilities	5 4 3 2 1
12. Up-to-date and adequate equipment	5 4 3 2 1
13. Adequate and available resource centers . . .	5 4 3 2 1
14. Utilizing a variety of effective teaching techniques	5 4 3 2 1
15. Relating on-the-job training to classroom instruction	5 4 3 2 1
16. Identifying job alternatives for students .	5 4 3 2 1
17. Utilizing cooperative education programs . . .	5 4 3 2 1
18. Sharing information through an effective communication system. .	5 4 3 2 1
19. Having and using school support services; specialists, library, etc.	5 4 3 2 1

20. What suggestions do you have for improving the career preparation (vocational program) in your school?

_____

_____

_____

_____

_____

APPENDIX D

SCHOOL SURVEY

April 1982

Dear District Administrator:

One of the priorities of my office is to improve the vocational education opportunities available to students in Wisconsin's secondary school system. Available statistics indicate that many students are exposed to some vocational education courses but that a small percentage completes a vocational program. In addition, many people have voiced a concern over the lack of opportunity for secondary students to enroll in a vocational program.

In order to effectively plan the vocational education program for students in this decade and the next, we need to have a better data base. The Secondary Vocational Education Evaluation Project funded through the DPI has completed the evaluation of most of the federally-funded vocational programs in Wisconsin. However, there is little information on the vocational programs and services offered by secondary schools which do not receive federal funds for these programs. Also, there is a lack of information on changes which have taken place in secondary vocational programs during the past ten years.

Recognizing these needs, the Parker/Janesville Foundation has granted funds to the Wisconsin Department of Public Instruction to study how secondary schools are preparing students for the world of work. The purpose of this award is to establish a baseline of data on vocational programs in 1970 and 1980. This study will identify the scope and characteristics of vocational programs in 1970 and 1980. Educators will be asked to identify changes in their vocational programs during this period. Employers will be asked to contrast the competencies of employees who completed a high school vocational education program with those who did not. They will also be asked to identify the types of competencies which are important for securing a job. Recent graduates will be asked to identify the strong and weak points of their high school preparation. All of this information will be important in developing a new model for vocational education at the secondary level.

The Department of Public Instruction has contracted with the Center for Vocational Education at UW-Stout to develop the data base on secondary vocational education programs. The enclosed survey is part of their research activities. Please take time to complete and return this survey as soon as possible. Results of the survey will be made available to participants when Phase I of the project has been completed.

Sincerely,

Herbert J. Grover
State Superintendent

HJG:ljh

Enclosure

April 12, 1982

Dear District Administrator:

As Dr. Grover has discussed in his cover letter, there is a need to develop a more comprehensive plan for the delivery of secondary vocational education. In order to develop this plan, more data are needed. Your school district can provide important information for this phase of the planning process.

The enclosed survey was developed to collect data that are not already available. It was designed so that most responses are made by circling a number or checking a response. About 15 to 20 minutes will be needed to complete the form.

If you have a staff member in charge of the vocational program in your school district, you may want to have this person complete the form. If there is more than one high school in your district, base the responses on this survey on the vocational programs in your district. Do not complete a survey form for each high school in your district.

When completing the survey, use data and information readily available. It is not necessary to collect additional information or to do extensive search of your records.

If you have any questions, please call us. (715-232-1382)

Please return the completed survey as soon as possible.

Your assistance with this study is sincerely appreciated.

Sincerely,

Orville Nelson
Director
Janesville/Parker Project

Margaret Melick
Special Project
Consultant

Betty Gertner
Special Project
Consultant

ks

Enclosure

UNIVERSITY OF WISCONSIN-STOUT IS AN EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION UNIVERSITY.

Please respond to the following items as they relate to your district's career and occupational preparation programs. ("Career" refers to introductory or exploratory courses. "Occupational" refers to courses which develop entry level skills.)

Below are several components that are sometimes included in career and occupational preparation programs. Please indicate the level at which they operate in your district by checking the appropriate response.

1. Relative to career and occupational preparation, our district: (Check all that apply.)

__1. Provides a full scale sequential program available to all students. Go to Item 2.

__2. Contracts with the local VTAE district to provide skill training. Go to Item 2.

__3. Participates in shared programs with neighboring school districts. Go to Item 2.

__4. Offers limited opportunities for skill development. Go to Item 2.

__5. Provides no opportunities for career or occupational preparation. Go to Item 14.

2-9. Circle the response which best describes the level of proficiency which students in your district can achieve in the particular class or program area.

Responses: 1 = NO = Program area not offered.
2 = EX = Exploratory only (3-6 week exposure to aid in career decision making)
3 = E/I = Exploratory and Introductory (one semester course; i.e., personal typing)
4 = BSD = Basic skill development (preparation for advanced courses or further post-secondary training)
5 = JE = Sequence of above leading to job entry level skill upon graduation (2-3 year sequential program)

COURSE OR PROGRAM AREA	NO 1	EX 2	E/I 3	BSD 4	JE 5
2. Agriculture.	1	2	3	4	5
3. Business and Office Education (secretarial, stenographic, clerical).	1	2	3	4	5
4. Home Economics (Food service, child care, etc.).	1	2	3	4	5
5. Industrial Education (T&I) (included auto mechanics, drafting, building construction, welding metals, electricity/electronics, etc.)	1	2	3	4	5
6. Marketing and Distributive Education	1	2	3	4	5
7. Health Occupations	1	2	3	4	5
8. Other vocational courses not listed above. Please specify_____	1	2	3	4	5
9. Special needs or special education courses for developing job skills	1	2	3	4	5

-go to the next page-

10. To what extent are micro-computers or computers used in your vocational program? (In Ag., Business Education, DE, Home Ec., Industrial Ed., etc. courses)

____1. Cmputers are not used.

____2. Some use is made in one or two courses.

____3. Computers are used in several of the vocational areas (Ag., Business, DE, etc.).

____4. Computers are used in all of the vocational areas.

11. To what extent do students who plan on attending college enroll in 11th and 12th grade vocational courses? (Use your best estimate.)

____1. 0 to 10% of these students enroll.

____2. 11-25% of these students enroll.

____3. 26-50% of these students enroll.

____4. 51-75% of these students enroll.

____5. 76-100% of these students enroll.

12. To what extent do students who are taking general programs enroll in 11th and 12th grade vocational courses? (These are students who are not planning to enroll in college and are not taking a vocational program in high school.) (Use your best estimate.)

____1. 0 to 10% of these students enroll.

____2. 11-25% of these students enroll.

____3. 26-50% of these students enroll.

____4. 51-75% of these students enroll.

____5. 76-100% of these students enroll.

13. What percent of your dropouts usually complete part of a vocational program?

____1. 0 to 10% of these students enroll.

____2. 11-25% of these students enroll.

____3. 26-50% of these students enroll.

____4. 51-75% of these students enroll.

____5. 76-100% of these students enroll.

-please go to next page-

14. To what extent does your district provide career interest assessment services to your high school students (Grades 9-12)?

____1. No interest assessment services are provided.

____2. An interest survey is available for students who want to take it.

____3. An interest survey is administered to all students.

____4. Other _____.

15. To what extent does your district provide aptitude and ability tests for services for your high school students (Grades 9-12)?

____1. No aptitude or ability tests are administered.

____2. An aptitude or ability test is available to students who want to take it.

____3. An aptitude or ability test is given to students who plan to go to college.

____4. An aptitutde or ability test is administered to all students.

____5. Other _____.

16. To what extent does your school system provide vocational counseling for your high school students (Grades 9-12)? This would include counseling activities that relate to career selection and planning and educational program that relates to a career objective. Check the best response.

____1. No career counseling is provided.

____2. Some. Those who request assistance receive career counseling.

____3. College-bound students receive most of the career counseling.

____4. Most students receive some career counseling.

____5. All students receive career counseling.

17. To what extent does your school system provide job placement services for students leaving your school system?

____1. No job placement services are provided.

____2. Some. Job vacancy notices received from employers are posted.

____3. Moderate. Employers are encouraged to send vacancy notices and students are often contacted concerning jobs related to their career interests.

____4. Extensive. St[illegible]act employers tc obtain job vacancy notices and an attempt[illegible]s made to contact students who have interests and abilities related to the jobs.

____5. Other _____.

-go to the next page-

18-32. In what types of business, industry and education partnerships is your school district involved? A list of partnership activities is given in the left column. Indicate the level of use on the right. Circle your responses. Use the following responses.

1 = NU = Not used

2 = SU = Slight use (used infrequently and involves few students)

3 = CU = Considerable use (used in a number of courses and involves a moderate number of students)

4 = EU = Extensive use (regular part of our program and involves a significant proportion of students)

PARTNERSHIP ACTIVITIES	Level of Use NU 1	SU 2	CU 3	EU 4
18. Business and industry (B/I) representatives participate on advisory committees.	1	2	3	4
19. School staff are members of community and business development committees	1	2	3	4
20. Students shadow (observe) workers in local B/I	1	2	3	4
21. B/I provides work sites for unpaid, short-term, work experiences (12 weeks or less) such as those used in EBCE (Experienced Based Career Education) programs.	1	2	3	4
22. B/I provides paid jobs for our work experience program . . .	1	2	3	4
23. B/I provides jobs for our WECEP program (Work Experience Career Education Program).	1	2	3	4
24. Our school identifies part-time jobs in local B/I for students who desire to work.	1	2	3	4
25. We have a cooperative education program (planned program of experiences to be provided on the job and in the school).	1	2	3	4
26. B/I provides refresher work experience for our teachers. . .	1	2	3	4
27. B/I provides an instructor for specific units in which our teachers do not have appropriate skills.	1	2	3	4
28. B/I loans or donates equipment for our vocational courses. .	1	2	3	4
29. B/I provides services, such as computer time, at a reduced rate for free.	1	2	3	4
30. Our vocational courses use B/I facilities and equipment for instructional labs	1	2	3	4
31. A staff member and a student plan a vocational program and a local business or industry provides all of the training for the program.	1	2	3	4
32. Other _____	1	2	3	4
33. Other _____	1	2	3	4

-go to the next page-

34. How did your vocational program change duirng the period from 1970 to 1980? Several program characteristics are given of the left. Indicate on the right whether each has decreased, increased, or stayed the same. Circle your response.

1 = D = Decreased 2 = S = Same 3 = I = Increased

PROGRAM CHARACTERISTICS	Change D 1	S 2	I 3
35. Proportion of the student body enrolled in vocational education	1	2	3
36. Numer of vocational areas offered (such as Ag., Business, DE, Home Ec., Industrial Ed., etc.)	1	2	3
37. Support services provided (vocational guidance, placement, etc.)	1	2	3
38. Participation of business and industry in providing vocational education experiences for our students.	1	2	3
39. Quality of equipment used in our vocational education courses.	1	2	3
40. Quality of the space provided for our vocational education courses.	1	2	3
41. Quality of the supplies and materials used in our vocational education courses	1	2	3
42. Number of vocational teachers (Include industrial arts and home economics teachers).	1	2	3
43. Other _____	1	2	3

44. What is the K-12 enrollment in your district?

___1. 399 or less.
___2. 400-699.
___3. 700-999.
___4. 1000-1999.
___5. 2000-3999.
___6. 4000-9999.
___7. 10,000 or more.

45. Does your school have the services of an LVEC? ___1. Yes ___2. No

46. Name of school (optional) _____

If you have any questions, please call Orville Nelson, Margaret Melick or Betty Gertner at 715-232-1382.

Thank you for responding.

Please return to: Center for VTAE
226 Applied Arts Bldg.
UW-Stout
Menomonie, WI 54751

61

APPENDIX E

MINI EVALUATION FORM

MINI-EVALUATION

Schools Without Voc. Ed. Programs

Activities of Evaluators

1. Administrator

   A. Is there a written philosophy of education? Does it contain a statement for those who do not anticipate post-secondary education?

   B. What were the results of the last accreditation report (if the school is accredited)?

      Have career programs been evaluated - I.A., Home Ed., Ag., etc. Special Needs? Ask for Wisconsin Senior Survey.

   C. Are facilities and equipment adequate for the programs offered? Is administration supportive of what is offered?

   D. How are staff supervised?

   E. How is curriculum developed (community interests, B/I needs, etc.)? Is curriculum articulated across subjects and grade levels?

   F. What are the usual teaching load and class size?

   G. How are teachers provided in-service or updating?

   H. Are nontraditional students recruited?

2. Teachers

   A. Do teachers provide displays or activities on careers related to their subjects?

   B. Do they utilize outside resources?

   C. Do they utilize curriculum guides and materials from DPI?

   D. Do any of their graduates go into the work force? How well do they do?

   E. How is program supervised?

   F. Are task analyses used to determine program content?

   G. How are special needs students served?

   H. How do employers feel about the graduates? (Do teachers talk to employers?)

I. Do you have an advisory committee for each area; I.A., Home Ec., Ag., etc?

J. Do your students belong to any career-related student organizations?

K. What job placement activities are carried on, if any?

3. Counselors

A. Is there a career information library?

B. Do you promote career counseling for students?

C. What kinds of information are displayed inside and outside the counselor's office?

D. Is there a graduate follow-up?

E. Do you attempt to get information from employers on those graduates who go into the work force?

F. What procedures are used to provide services to all students?

4. Employers

A. How effective are graduates?

- Knowledge
- Skills
- Attitude

By type of graduate:
- vocational
- college prep
- general

B. What is their potential for leadership?

C. How satisfied are you with graduates' performances?

D. Describe emerging skill needed. What new technology is being considered?

5. Students

A. How did they select course of study?

B. How well satisfied are they with programs?

C. Are they aware of vocational programs in the district?

6. Graduates

A. How satisfied are they?

B. What was <u>most</u> useful course?

C. What would they like to see changed?

APPENDIX F

POOL FUNDS

THE STATE OF WISCONSIN • DEPARTMENT OF PUBLIC INSTRUCTION
125 South Webster Street • Box 7841 • Madison, Wisconsin 53707

Herbert J. Grover, State Superintendent / B. Dean Bowles, Deputy State Superintendent

April 26, 1983

Dear District Administrator:

As you know, a $1 million pool of Federal money was established in 1982-83 for vocational education contracting. To date, approximately 250 grant awards have been awarded to 120 of your school districts. I'm pleased with this new opportunity to help some of our Wisconsin high school students be better prepared for work or for post-secondary education. You and your staff are to be commended for your efforts in this accomplishment.

The set of guidelines developed by staff members from both agencies and approved by the Wisconsin Board of Vocational, Technical, and Adult Education is enclosed. The "pool" is increased to $1.5 million for 1983-84 and the funding level for the 1983-84 fiscal year is 100% of the allowable costs; however, because funds may not supplant existing local/state funds, the projects must be new and expanded programs. School districts with an approved pool project(s) in FY 83 (July 1, 1982 - June 30, 1983) may send in a renewal application(s) for FY 84 (July 1, 1983 - June 30, 1984).

In addition to the guidelines, the revised State Uniform Contract Agreement for Instructional Services, PI-1385, Rev. 4-83 (Pursuant to Sec. 118.15(1) (6) Wis. Stats.) for instructional programs is also enclosed. This contract must be completed and attached to your application for funding. If you need additional copies, you may duplicate them. Since the contract has been revised, please discard any "old" contract forms.

Because the Department of Public Instruction has been designated to administer these funds, a specific application form was developed for these contracted programs (PI-1384, Rev. 4-83). A copy of this application form, with instructions, is enclosed along with the guidelines and contract. The application form has been revised. Please discard any "old" application forms and instructions. If you wish to submit an application for an articulation project, you may use the existing PI-1301 form. In addition, complete a vocational education financial plan (PI-1313) and send with your application.

District Administrator

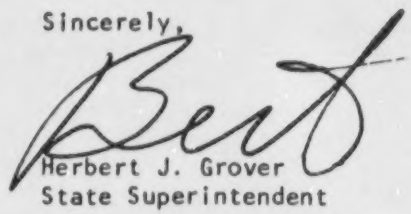
Applications for first semester will be accepted until June 1, 1983, for 1983-84 programs. Any proposals for first semester will be reviewed and approved when received; however, they must be approved prior to implementation. If funds are still available, additional proposals for second semester will be solicited at a later date. If you have specific questions, please contact Richard Dignan (608) 267-9244 in the Bureau for Vocational Education.

The Department will be proposing a minor change in the 1983-84 guidelines. When the proposed change is reviewed and approved by the Wisconsin Board of Vocational, Technical, and Adult Education, you will be notified in writing.

I am very pleased to offer this opportunity as an incentive for programs which will provide students with positive work attitudes, job related marketable skills, and encouragement to continue their occupational training.

I encourage you to take advantage of this program. Please feel free to request the assistance of our Vocational Education staff as you develop these new and expanded programs.

Sincerely,



Herbert J. Grover
State Superintendent

HJG:md

Enclosures

cc: LVEC
Director of Special Education

Wisconsin Department of Public Instruction

1983-1984

Guidelines for Use of Pool Funds for Vocational Education Contracting

1) Applications for project approval should be made on forms furnished by the Department of Public Instruction. Project applications will be developed jointly and signed by the administrators of all participating schools.

2) Proposals for projects will be funded based upon the requirements of the Federal Vocational Education Act. Funds not expended in 1982-83 shall be added to the 1983-84 allocation; thereafter, unexpended funds will be returned to the agencies in proportion to their contribution to the pool.

3) Priorities for funding are as follows:

   A) Projects between a VTAE District and a single high school district or cluster of high school districts will be given the highest priority. And in the eventuality that total "Pool" dollar amounts will not be expended, then:

   B) Projects between two high school districts or among a cluster of high school districts may be funded.

4) Projects will be limited to new and expanded programs. (Supplanting is not permitted within the Federal Vocational Education Act.)

5) Project funding approvals are limited to those expenditures permissible under the State Uniform Contract agreement (Instructional salaries, fringes, textbooks and supplies).

6) Project approval is limited to vocational education instructional programs and/or articulation programs. <u>These programs may include unique support services necessary to allow special needs learners to benefit by these vocational education instructional programs</u>.

7) Projects may be class-size or for slotting students into existing classes at the host school.

8) Payment of pool funds will be to the high school district. Funding will be 100% of the allowable costs of a uniform contract (Instructional salaries, fringes, textbooks and supplies).

9) Projects must be approved by the Department of Public Instruction prior to implementation.

10) Guidelines for funding are subject to review and change as needed by the State Board.

dls
10-1-83

APPENDIX G

JOB TRAINING PARTNERSHIP ACT

JTPA

THE STATE OF WISCONSIN • DEPARTMENT OF PUBLIC INSTRUCTION
125 South Webster Street • Box 7841 • Madison, Wisconsin 53707

Herbert J. Grover, State Superintendent / B. Dean Bowles, Deputy State Superintendent

DATE: February 21, 1984

TO: District Administrators, LVECs, JTPA Liaisons, WBVTAE, VTAE District Administrators, WISCOR Members, other CBOs, State Agencies

FROM: Herbert J. Grover
State Superintendent

SUBJECT: The Governor's 8% Setaside for Education Coordination Grants As Administered by the Department of Public Instruction

I continue to be excited by the potential of the Job Training Partnership Act (JTPA) to provide programs to serve the education and training needs of school-age youth ages 14-21. To realize JTPA's full potential, secondary districts and other agencies which serve youth should cooperate to provide the best education and training possible to meet the needs of economically and educationally disadvantaged youth.

During the 1984-85 funding year, the Department of Public Instruction will administer $1.2 million of the Governor's 8% Setaside of the Job Training Partnership Act. The attached INFORMATION BULLETIN outlines the Department's policies and procedures in administering the 8% Setaside funds. To further clarify issues about JTPA funding and program implementation, the DPI/JTPA staff will be conducting three regional workshops in Eau Claire, Green Bay and Madison on March 5, 6, and 7 respectively.

We anticipate approving projects by May 18th so that programs may be implemented when school begins in the fall. Projects will be funded for the school year.

If you have a project idea or seek to refund an existing 8% project, please attend one of the regional workshops. (Those existing 8% projects, showing demonstrated effectiveness, may be given priority funding consideration.) You will need to work closely with the appropriate DPI/JTPA staff member for your Service Delivery Area to develop the project idea into an 8% Application. The DPI/JTPA staff is listed at the end of the INFORMATION BULLETIN.

MK/DM1

THE STATE OF WISCONSIN • DEPARTMENT OF PUBLIC INSTRUCTION
125 South Webster Street • Box 7841 • Madison, Wisconsin 53707

Herbert J. Grover, State Superintendent / B. Dean Bowles, Deputy State Superintendent

INFORMATION BULLETIN

The Governor's 8% Setaside for Education Coordination Grants as Administered by the Department of Public Instruction

This year the Department of Public Instruction (DPI) will administer $1.2 million for projects of the Governor's JTPA 8% Setaside. These projects will be designated to meet the education and training needs of economically disadvantaged youth ages 14-21. DPI will fund exemplary projects which can serve as models for statewide dissemination and which coordinate services with other agencies also providing education and training programs.

The Act specifies that 75% of 8% project participants must be income-eligible youth. The remaining 25% of participants must have other identifiable "barriers to employment." No 8% funds can be spent on participants not certified as income-eligible or as having identified barriers to employment.

Additionally, DPI is required to target 85% of its funds to provide services to youth ages 14-21 who are dropouts or one grade level behind his/her high school entering class in progress toward meeting graduation requirements. This requirement of the Wisconsin Legislature is intended to insure that "the most disadvantaged of the eligible population" are served first.

Since DPI expects 8% projects to serve income-eligible, at-risk youth, an attached list delineates at-risk and other student populations eligible for 8% services. (See Attachment A.)

The Act requires that programs have measurable results. DPI has identified a list of Expected Program Outcomes which is consistent with the Act and the Act's intent for 8% funds. All 8% projects should be designed to incorporate as many of these outcomes as is appropriate for the program's intent and design. (See Attachment B.)

The Department of Public Instruction will fund approvable projects that are submitted by Local Education Agencies (LEAs), Cooperative Education Service Agencies (CESAs), and County Children's Handicapped Boards. These agencies may subcontract for services as needed from other service providers such as VTAE districts, community based organizations, private industry, etc. Subcontracts with other organizations must accompany the project proposal.

Projects submitted to DPI must be concurrently submitted to the Private Industry Council (PIC) within your Service Delivery Area. Before project approval is finalized, a "joint agreement" must be signed between the grant recipient, the Service Delivery Area and the Department of Public Instruction.

The 8% dollars administered by DPI are required by the Act to have a dollar-for-dollar local match for all 8% funds. Requirements for local match are outlined in Attachment C.

This year DPI will use a Pre-application Process to help determine funding. After attending a regional drive-in on 8% funds and after discussing project ideas with the appropriate DPI/JTPA staff person, agencies will have until March 28 to submit a written pre-application consisting of a detailed abstract and budget.

The DPI/JTPA staff will then review all pre-applications according to established Criteria for Reviewing 8% Projects. On April 9, Dr. Grover will invite those agencies with high evaluations to write the complete 8% application. This application is due in DPI by May 4. Final 8% project approval will be made by May 18. Criteria for reviewing 8% proposals are listed in Attachment D.

If you wish to apply for 8% funds, please contact the appropriate DPI/JTPA staff person and register for one of the three regional 8% drive-ins.

March 5	Eau Claire	District 1 Technical Institute	9 a.m. - Noon
March 6	Green Bay	CESA #9 Offices	9 a.m. - Noon
March 7	Madison	Holiday Inn - Southeast	1-4 p.m.

Richard Dignan, Director Bureau for Vocational Education	(608) 267-9244
Wayne Sherry, Administrator Job Training/Special Needs Section Bureau for Vocational Education	(608) 267-9166
Patrick Sweeney JTPA Education Specialist	(608) 266-2158
Sandra Cicchini JTPA Education Specialist SDAs 3, 7, 12, 18	(608) 266-2158
Melinda Waggoner JTPA Education Specialist SDAs 4, 6, 14, 17	(414) 497-3755
Leslie Schoenfeld JTPA Education Specialist SDAs 2, 5, 8, 10, 15	(608) 267-9247
Robert Enghagen JTPA Education Specialist SDAs 9, 11, 13, 16	(715) 723-0341

Attachments Included

Priority Target Populations
Expected Program Outcomes
Matching Requirements
Criteria for Review
Definitions of JTPA Program Areas
Funding Appeal Procedure
Client Eligibility Criteria
Agreement for Provision of Services

Attachment A

PRIORITY TARGET POPULATIONS - IN-SCHOOL YOUTH

At-risk youth/dropouts. This group includes subgroups with the following descriptors:

a. **Dropouts.** The average dropout rate from each grade (9-12) is 4% per year. This is a continuing problem, although it has decreased in Wisconsin. It is recognized that not all dropouts are economically disadvantaged, but it is estimated that a good percentage are.

b. **Drug and alcohol abusers.** It has been projected that 50% of the youth that end up in special service programs do so because alcohol or drug abuse was a contributing factor.

c. **Non-goal directed youth.** These include individuals who lack direction in their in-school experiences, and frequently from the home; unmotivated, lacking sense of responsibility individuals, ages 16 through 21, also fit this descriptor.

Adjudicated Delinquents, incarcerated youth and recently released. In 1980, 12,573 youth were detained and of that total approximately 1,000 youth were admitted to juvenile correctional institutions. Our agencies have initiated efforts with other agencies to serve these youth, but need to expand on what has already been done.

Teenage parents. The 1981-82 Summary of Exceptional Services identified 360 served school-age mothers. This number only represents those served. We would estimate that there is a significant population not receiving special services.

Special populations within our secondary schools which could greatly benefit from new or expanded education and vocational training include:

a. Limited English Proficiency (LEP)
b. Minorities
c. Females

Handicapped, i.e. the deaf, blind, mentally retarded, learning disabled, emotionally disturbed, and physically handicapped.
NOTE: Handicapped individuals 16 years or older can be defined as a family of one for determining eligibility.

Unemployed youth. Approximately 24% of Wisconsin's youth are unemployed, based on an aggregate report from UW-Stout evaluations running from 1978-1982. This unemployment rate is much higher than for the adult population and is partially due to the need for additional education and training.

Rural residents. Youth who are located in rural areas of the state and who will typically not receive services from service providers through SDA funded projects, i.e. youth who attend school districts with less than 800 K-12 populations.

Other. Youth who are listed as priority target population in the objectives of the Governor's Coordination and Special Services Plan.

Attachment B

EXPECTED PROGRAM OUTCOMES

To coordinate with other JTPA funds administered through the Service Delivery Areas (SDAs) following review and comment by the SDA;

To coordinate JTPA funded programs with existing programs for disadvantaged youth, including dropouts, that are provided by secondary schools ensuring linkages with program offerings utilizing state categorical funds, VEA funds, Chapter I funds, Social Services, Community Based Organizations; etc.

To develop partnerships with business, industry and labor on the local and state levels;

To develop on-the-job training sites in local communities for youth enrolled in secondary schools for work/training/transition to world of work exploration programs;

To provide job skill training to economically disadvantaged by establishing education and job training programs designed specifically to meet the needs of JTPA clients as determined in partnership with the service delivery area Private Industry Council utilizing the Youth Initiative model;

To provide academic support programs to JTPA clients, including assessment services, academic counseling, and basic education to those requiring it to succeed in job skill training;

To assist JTPA students in the acquisition of financial aids they may qualify for under federal, state, and local programs;

To develop linkages with federal, state and local agencies capable of providing support services needed by JTPA clients in order to participate in skill training programs;

To provide technical assistance and coordination services to business and industries serving JTPA clients;

To develop model cluster or consortia of rural secondary school programs throughout the state to provide more extensive training opportunities for disadvantaged youth less apt to participate in SDA funded programs in more heavily populated areas in each area of the state;

To develop model programs for economically disadvantaged youth that can be implemented in any school district that has students with similar needs;

To develop model "dropout recruitment" program(s) that will result in more students completing accredited high school programs with basic skills and job skills necessary to acquire and maintain unsubsidized employment;

To develop model education and training programs for school-age youth who are adjudicated delinquents, youth in need of protective custody or services and other high-risk youth under formal or informal dispositional agreements within the juvenile justice system; and

To develop model programs that will result in the development of competency based curriculum for basic skills and vocational preparation programs for economically disadvantaged youth.

ATTACHMENT E

DEFINITIONS OF JTPA PROGRAM AREAS

1. *PREPARATION FOR EMPLOYMENT TRAINING* - Program components that result in bringing individuals to a level where they will be able to participate in further training or obtain employment. Components provided under this program area may result in employment, or may achieve specific objectives for an individual. Examples are: attainment of a high school diploma, a GED certificate, Adult Basic Education, education for employment programs, pre-employment skills training.

2. *VOCATIONAL SKILLS TRAINING* - Program components that are focused toward learning skills for a specific occupational area. Components provided under this program area should result in employment. Examples are: A specific course of study at a secondary or vocational school or other training program, retraining laid off workers for different jobs.

3. *EMPLOYER LINKED TRAINING* - Program components that are focused toward learning skills for a specific occupational area and are linked to being placement in an unsubsidized job upon completion of the training. The involvement of the employer in this type of training should occur in the first planning stages to be classified in this program area. Additionally, there must be a commitment by an employer or group of employers to hire the participants upon successful completion of training. Examples are: on-the-job training (OJT), customized training, entry employment experience programs, upgrading, retraining, private sector training.

4. *PLACEMENT RELATED TRAINING* - Program components that are designed to assist individuals who have adequate vocational skills to get and keep a job. Examples are: job search assistance, job counseling, relocation assistance, job clubs, employer outreach, job development, school-to-work assistance programs, or job counseling after being hired.

5. *TRAINING PROGRAM ENTRY ACTIVITIES* - Program components which must be done for JTPA eligible participants in order for them to *enter* a program. Examples: outreach, counseling, and employability assessment.

6. *SYEP (Summer Youth Employment Program)* - Program components conducted under Title II-B of the Act.

7. *OTHER* - Program Activities or services which do not fit into any of the other 6 program areas. Examples are: employment generating services, labor market information.

Listed on the following page are the specific program components for each program area as the Governor's Employment and Training Office has defined them. The Department of Public Instruction, in conforming with GETO's guidelines, asks that all 8% projects be identified by program area(s) and that each program area then be broken into its specific program components.

PROGRAM AREAS and PROGRAM COMPONENTS

1. PREPARATION FOR EMPLOYMENT TRAINING

___ Basic Life Skills Training/ Survival Skills Training
___ Basic Skills Training/ABE/Remediation
___ Classroon Training
___ Education-for-Employment Program
___ English as a Second Language
___ GED
___ Labor Market Orientation
___ Pre-Employment Skill Training
___ Pre-Layoff Assistance
___ Preparation for Apprenticeship
___ Tutoring
___ Vocational Exploration
___ Work Experience

2. VOCATIONAL SKILLS TRAINING

___ Advanced Career Training
___ Basic Life Skills Training/ Survival Skills Training
___ Classroom Training
___ Cooperative Education Programs
___ Entry Employment Experience Program
___ Pre-Layoff Assistance
___ Preparation for Apprenticeship
___ Private Sector Operated Training Programs
___ Retraining
___ Vocational Skills Training
___ Work Experience

3. EMPLOYER LINKED TRAINING

___ Basic Life Skills Training/ Survival Skills Training
___ Basic Skills Training/ABE/Remediation
___ Classroom Training
___ Cooperative Education Programs
___ Customized Training
___ On-the-Job Training
___ Pre-Apprenticeship Programs
___ Pre-Layoff Assistance
___ Private Sector Operated Training Programs
___ Retraining
___ Upgrading
___ Vestibule Training
___ Vocational Skills Training
___ Work Experience

4. PLACEMENT RELATED TRAINING

___ Basic Life Skills Training/ Survival Skills Training
___ Classroom Training
___ Coaching
___ Employment Counseling
___ Job Clubs
___ Job Corps
___ Job Development
___ Job Holding
___ Job Search Assistance
___ Job Seeking Skills Training
___ Labor Market Orientation
___ Pre-Layoff Assistance
___ Relocation Assistance
___ School-to-Work Transition Activities

5. TRAINING PROGRAM ENTRY ABILITIES

___ Coaching
___ Employability Assessment
___ Employability Development Planning
___ Labor Market Orientation
___ Participant Outreach

6. SUMMER YOUTH EMPLOYMENT PROGRAM

___ Basic Life Skills Training/ Survival Skills Training
___ Basic Skills Training/ABE/Remediation
___ Classroom Training
___ GED
___ Job Holding
___ Job Restructuring
___ Job Search Assistance
___ Job Seeking Skills Training
___ Labor Market Orientation
___ Pre-Apprenticeship Programs
___ Work Experience

7. OTHER

___ Employer Outreach
___ Employer Generating Services
___ Labor Market Information

APPENDIX H

REFERENCES

References

Ayres, Robert and Maller, Steven. "Preparing for the Growth of Industrial Robots, Part II." Wisconsin Employment and Economic Indicators. Madison, WI: DILHR, November 1981.

Barlow, Melvin L. "Foundations of Vocational Education." AVA Journal. March 1967. p. 16, as reported by the National Society for the Promotion of Industrial Education and the Smith-Hughes Act of 1917.

Birch, David L. Presentation Delivered to the Council of Upper Great Lakes Governors, Green Bay, WI: March 5, 1982.

Brandner, Patricia. A Follow-up Study of Class of 1975 of Medford Senior High School. Menomonie, WI: unpublished Master's thesis, UW-Stout, 1974.

California Advisory Coucil on Vocational Education and California Employment Training Advisory Council. Summary Report: Employment Problems and Programs for Inner-City Youth. November 1981.

Chaloupka, Ernest C. A Follow-up Study of 1976, 1977, 1978, 1979 Graduates of Newman High School. Menomonie, WI: unpublished Master's thesis, UW-Stout, 1974.

Changing Work Force Needs with Implications for Higher Education. Madison, WI: October 23 and 24, 1978.

Dale, Dorothy. First Annual Composite Evaluation Report for Secondary Vocational Education in Wisconsin 1977-78. Menomonie, WI: UW-Stout, 1978.

Dale, Dorothy; Klitzke, Elizabeth; Larson, Charlene; and Gertner, Betty. Fourth Annual Composite Evaluation Report for Secondary Vocational Education in Wisconsin, 1980-81. Menomonie, WI: UW-Stout, 1981.

Dale, Dorothy; Klitzke, Elizabeth; Larson, Charlene. Second Annual Composite Evaluation Report for Secondary Vocational Education in Wisconsin, 1978-79. Menomonie, WI: UW-Stout, 1979.

Dale, Dorothy; Klitzke, Elizabeth; Larson, Charlene; and Gertner, Betty. Third Annual Composite Evaluation Report for Secondary Vocational Education in Wisconsin, 1979-80. Menomonie: UW-Stout, 1980.

deLeon, Richard. Youth Employment and the Private Sector. Philadelphia: Corporation for Public/Private Ventures, 1978.

Elving, Ron. "Schools Failing, Reuss Study Says." Milwaukee Journal, March 8, 1982.

Evans, Francis B., and Harmon, Judson. The Opinions of Wisconsin Residents about Educational Goals, Department of Public Instruction Responsibilities, Cost-Cutting Methods and Several General Issues. Madison, WI: Wisconsin Survey Research Laboratory, June 1978.**

Evans, Rupert. Foundations of Vocational Education. Columbus: Charles E. Merrill Publishing Company, 1971.

Fall, Eugene. A Follow-up Study of 1963, 1968, 1970, 1972 Graduates of Turtle Lake High School. Menomonie, WI: unpublished Master's thesis, UW-Stout, 1974.

Final Report of a Three-Year Pilot Program in High School Vocational Education. Madison, WI: DPI, Division for Services, August 1968.

Gilbertson, Carlyle. 1982 WPGA Task Force Study - Status of Counseling in Wisconsin. Menomonie, WI: UW-Stout, 1982.

Goldstein, Harold. Future Labor Market Demand and Vocational Education. Washington, DC: National Institute of Education, September 1980.

Golladay, Mary A., and Wulfsherg, Roll M. The Condition of Vocational Education. Washington, DC: National Center for Education Statistics, July 1981.

Gosling, James. Wisconsin Industry Projections to 1990 Employment Demand. Madison, WI: Department of Industry, Labor and Human Relations, June 1982.

Halfin, Harold; Melick, Margaret; and Nelson, Orville. Evaluation of the Secondary Vocational Education Delivery System in Wisconsin. Menomonie, WI: UW-Stout, 1981.

Johnson, Gary J. Follow-up Study of the 1967, 1970, and 1972 Graduates of Loyal High School. Menomonie, WI: unpublished Master's thesis, UW-Stout, 1974.

Kaufman, Darwin, and Griffin, Mary. Development and Use of Assessment Instrumentation to Reduce Barriers to Employment. Madison, WI: Bureau of Evaluation, Planning, Information and Research, Wisconsin Department of Public Instruction, 1980.

Kistler, Donald F. A Follow-up Study of the Class of 1966 of Menomonie High School. Menomonie, WI: unpublished Master's thesis, UW-Stout, 1970.

Maynard, Rebecca. The Impact of Supported Work on Young School Dropouts. Manpower Demonstration Research Corporation, September 1980.

McCune, Robert J. A Follow-up Study of 1973, 1975, 1977 and 1979 Graduates of Arcadia High School. Menomonie, WI: unpublished Master's thesis, UW-Stout, 1981.

Melick, Margaret, et al. "Final Report: Assessing the Effects of Work Experience on CETA Youth Program Participants." Menomonie, WI: UW-Stout, Center for VTAE, 1979-80 and 1980-81.

Meyer, Robert A., and Wise, David A. High School Preparation and Early Labor Force Experience. Cambridge: National Bureau of Economic Research, March 1980.

Meyer, Robert S. Report to the Wisconsin Department of Public Instruction of the Results from a Student Opinionnaire Concerning Career Education in the Public Schools of Eau Claire, Wisconsin in December, 1972 and May, 1973. Madison, WI: WBVTAE, 1973.

Milwaukee Journal. Want Ad Section. January and October 1980 issues.

Mitchell, Anita M. Career Development Needs of Seventeen-Year-Olds; How to Improve Career Development Programs. Washington, DC: National Advisory Council for Career Education, September 1977.

Nunez, Ann R., and Russell, Jill Frymer. Manufacturers Views of Vocational Education. Columbus, OH: National Center for Research in Vocational Education, 1981.

Page, Philip; Weiss, Lissy; and Bell, Allan. Tri-Agency Education Basic Skills Project. Madison, WI: Governor's Employment and Training Office, 1980.

Public-Private Partnerships for Dealing with the Employment Problems of Youth, September, 1977.

Pugh, Janet, DILHR Librarian, phone interview, Youth Employment Data, June 17, 1982.

Selz, Nina, et al. Functional Competencies for Adapting to the World of Work. Columbus, OH: National Center for Research in Education, The Ohio State University, 1980.

Speight, Paul, and Van Ness, Peter. Wisconsin's In-School Job Placement Program. Madison WI: Wisconsin Department of Public Instruction and Job Service, January 1979.

Wiltrout, Dan, ed. WECE Newsletter. Madison, WI: Wisconsin Department of Public Instruction, April 1982.

Wirtz, Willard and the National Manpower Institute. The Boundles Resource. Washington, DC: The New Republic Book Co., Inc., 1975.

Wisconsin Department of Public Instruction. The Final Report on a Three-Year Pilot Program on High School Vocational Education. Madison, WI: August 1968.

Wisconsin Vocational Studies Center. Status Report on the Wisconsin Career Information System. Madison, WI: September 1981.

Wisconsin Youth, Work and the Economy - What Now? Madison, WI: DILHR, Job Service Division, Labor Market Information Section, October 1981.